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ABSTRACT

This analysis of achievement and descriptive data from 20 compensatory education projects funded under Chapter 1 of the Education Consolidation and Improvement Act serving highly educationally disadvantaged students indicates that these projects are serving high-need students effectively. A wide variety of kinds of school systems delivered effective services using a variety of philosophies and approaches. The projects investigated had the following characteristics: (1) they were in high poverty areas, either districtwide or in pockets; (2) urban, suburban, and rural areas nationwide were represented; (3) they demonstrated achievement gains for at least 2 years; and (4) they were recognized as successful through the Secretary of Education's National Recognition Program or through state recommendation. The following effective practices were noted: (1) a conviction that every child can learn; (2) an urgent need to see quick results; (3) acceptance of the responsibility for delivering quality instruction to students with special needs; (4) willingness to work hard; (5) use of a variety of materials; and (6) great degrees of teacher sensitivity and persistence. Statistical data are included on six tables. A list of 13 references and case studies of the 20 programs are appended. (FMW)

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A Technical Investigation
conducted by the regional
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Effective Compensatory Education Programs For Extremely Disadvantaged Children

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Effective Compensatory Education Programs for Extremely Disadvantaged Students

Executive Summary

Analysis of achievement and descriptive data from twenty Chapter 1 projects serving highly educationally disadvantaged students indicates that, contrary to recent published reports, some Chapter 1 projects are serving high-need students effectively.

Evidence of effectiveness includes:

- mean NCE gains of almost 45% greater than the national average, for ten sites with fall-to-spring testing cycles
- mean NCE gains of more than double the national norm for six sites with spring-to-spring testing cycles
- continued academic growth after Chapter 1 participation at six sites; maintained growth at one site
- alternate evidence of gain from three sites not using TIERS data

General findings were:

- a wide variety of kinds of school systems are delivering effective services
- projects represented a variety of philosophies and approaches, but all exemplified high-quality program implementation

Effective practices noted include:

- practitioners with common beliefs and practices, including
  - a conviction that every child can learn
  - an urgent need to see quick results
  - acceptance of the responsibility for delivering quality instruction to students with special needs
  - a willingness to work hard
- high need students benefiting from innovative and intensive services, including
  - use of a variety of materials
  - great degrees of teacher sensitivity and persistence

The twenty Chapter 1 projects investigated:

- have high poverty, districtwide or in pockets
- represent urban, suburban, and rural areas nationwide
- show achievement gains for at least two years
- have been recognized as successful through the Secretary's National Recognition Program or through state recommendation

The study was conducted:

- by staff from the four Chapter 1 Technical Assistance Centers
- as a Technical Investigation done at the request of TAC federal contract project officers

Further study may investigate:

- the psychometrics of effectiveness–what new data analyses will shed more light on serving high need students?
- the processes of effectiveness–what specific and perhaps replicable organizational and instructional processes contribute to effective programs for high-need students?
- the process of improvement–in what specific and perhaps replicable ways do projects become effective with high need students?

Introduction

The purpose of the study was to determine whether or not Chapter 1 programs exist which are effectively serving the most at need student. If such projects were identified, a second purpose was to describe the characteristics of a sample of those programs.

Since 1966, Title I of the Elementary and Secondary Education Act (now Chapter 1 of the Education Consolidation and Improvement Act) has provided compensatory educational services for low-achieving students who live in areas with relatively high concentrations of poverty. In the last decade, studies have examined the effectiveness of compensatory education in improving the reading and mathematics achievement of participating children. These studies have painted a mixed picture of program success.

The findings of the major evaluation studies of Chapter 1, including those of the Sustained Effects Study (Carter, 1983), the U.S. Department of Education's analyses of local, state and national program data (Stonehill and Anderson, 1982; Anderson and Stonehill, 1986), and Mullin and Summers (1983) meta-analysis of evaluation results, indicated that:

- On average, Chapter 1 programs have had a modest, positive effect on the achievement of disadvantaged students.
- Gains appeared to be greater in earlier grades.
- Gains were not consistently associated with either dollars spent or with the application of any single educational approach.
- Students who were "promoted out" of Chapter 1 continued to perform at their enhanced levels, and did not seem to revert to lower achievement levels during the first year after compensatory education services had been discontinued. However, gains were generally not sustained over a period of more than two years following program participation.
- Chapter 1 was most effective for students who were only moderately disadvantaged, but it did not appear to substantially improve the relative achievement of the most disadvantaged part of the school population.

As Carter (1984) stated:

> Low-achieving students did not seem to benefit from the Title I program, and we believe that a new program with more intensive and innovative techniques of instruction should be devised for these students.

This investigation sought to test the generalizability of that perception. The method involved the examination of twenty projects previously recognized as providing exemplary services to extremely disadvantaged students.

The remainder of this report is divided into four sections. The first section describes the characteristics of 20 sites which appeared to be providing beneficial services to historically low achieving populations. The second presents evidence of the success of these programs at increasing students achievement. The third section discusses the organizational and instructional attributes that appeared to be shared across the projects. Finally, the report presents overall conclusions and discusses additional planned activities designed to further expand upon the findings of this study.

Method

The Chapter 1 Technical Assistance Centers' Technical Investigation team determined that resource availability limited the study to a maximum of 20 nominated sites.

Sites were to be selected on four criteria:

1. The projects served high need students as defined by high concentrations of poverty, either in districts or schools, and the projects historically served children with low-entry level skills.

2. The projects were selected from programs across the nation in urban, suburban and rural areas, as well as small- and medium-sized towns.

3. The projects had quality data to document their effectiveness for at least two years.

4. The projects had received formal federal or state recognition as exemplary programs, or had been invited to seek such recognition.

Programs were nominated primarily from those that had received recognition from the U.S. Secretary of Education during the 1984-85 school year. Programs had been selected for this recognition based on their use of effective practices and a history of effectiveness as demonstrated by evaluation results. A group of programs that served extremely deprived students was selected from this pool of effective programs. Three additional study projects had a history of success with highly disadvantaged students (as evidenced by their annual Chapter 1 evaluation data), had received local or state recognition, were felt by state coordinators to be exemplary, yet had not applied for national recognition.

The relationship between educational need and poverty is contained in Chapter 1 legislation and regulations, and has been the subject of considerable empirical investigation, most recently summarized by Kennedy, Jung, and Orland (1986). These analyses indicate that the degree of the relationship between poverty and educational need largely depends on the level of analysis. Large concentrations of impoverished students are far better predictors of lower than average achievement scores at the district and school levels, than at the individual student level. The levels of analyses for the present study included district, school, and individual student data. District level poverty indicators varied considerably across sites.

Site Characteristics

The sampling process resulted in the selection of 14 district-wide programs (with average district mean pretest performance ranging from the fourth to the 24th percentile). Six single or multiple school projects/sites within districts were selected as providing exemplary services to high need students within somewhat more affluent larger districts.

The 20 sites included three rural areas, three small towns, two suburban and 12 urban projects. Student enrollments in the districts ranged from 265 to over 90,000.

The racial/ethnic composition of the student bodies proved similarly diverse. Some were as high as 97% Black, others predominantly white (as high as 98%). One site's student body was 83% native American, and another was 50% Hispanic. Asian students were present in most of the sites. Several sites had high percentages (e.g. 35%) of homes receiving Aid to Families with Dependent Children (AFDC) and up to 98% of students qualified for free or reduced lunches. Often, parents had low levels of educational attainment. Tables 1 and 2 summarize demographic characteristics of the districts from which highly impacted projects were drawn.

There were two exceptions to this scenario. Two districts' Chapter 1 populations were defined as highly disadvantaged while the district demographics indicated a generally advantaged population. One rural, impoverished area had become the site of a development populated by affluent young professionals. The school system had grown tremendously and had become dominated by affluent high achieving students. The original residents remain in the community, however, and their children constituted the bulk of the Chapter 1 population. The second involved bussing of inner city children to a suburban district to achieve racial integration.

The sites at which individual schools or projects were studied were characterized by pockets of poverty in relatively affluent communities. In all cases, the Chapter 1 program was characterized by low mean pretest percentiles at the entry point into the Chapter 1 program.

Most Chapter 1 programs began as early as first grade. One began in the fourth grade.

The curricular areas studied were reading and/or mathematics. Of the 20 sites, 13 included both reading and math programs, five focused on reading, and two focused exclusively on math at the grade levels studied.

Though the grade range of some projects included the entire elementary school, the study was restricted to analyses of data from grades four to six. An early decision to limit analyses to grades four to six had been made, and at many sites proved problematic. If, for example, an elementary grade project had provided exemplary services to children in grades K-3, the number of highly educationally needy students in grades 4-6 would necessarily be small and unrepresentative of the potential at risk population.

Table 1: Characteristics of Sites in which the District Program was Studied

SITE	TYPE OF COMMUNITY	DISTRICT ENROLLMENT	PERCENT OF FAMILIES IN POVERTY [1,2]	PERCENT OF STUDENTS RECEIVING FREE/REDUCED LUNCH[1]	RACIAL COMPOSITION				
					B	W	H	A	O
Birmingham, AL	Urban	44,277	30.9	70.0	81	19	0	0	0
Pueblo, CO	Mid-size Town	19,086	17.9	46.0	2	50	47	0	1
District of Columbia	Urban	90,000	25.3	69.0	Not Available				
New London, CT	Urban	3,000	25.0	26.0	30	48	18	0	0
Red Clay, DE	Mid-size Town	13,000	7.0	**	30	60	7	0	1
Boise, ID	Urban	22,000	9.5	29.7	1	93	2	1	3
Louisville, KY	Urban	92,000	15.4	63.75	30	69	0	0	1
Carroll County, MS	Rural	1,071	35.1	98.0	86	14	0	0	0
Portsmouth, RI	Small Town	2,700	3.4	**	1	97	1	0	1
Dillon, SC	Rural	4,800	33.5	72.0	43	54	0	3	0
Abilene, TX	Samll Urban	17,174	13.9	21.0	10	68	21	0	0
Tacoma, WA	Small Urban	26,100	13.8	47.19	17	70	2	3	8
Wheeling, WV	Samll Town	7,500	14.0	31.0	6	93	0	0	0
Arapahoe, WY	Rural	265	16.6	89.0	0	17	0	83	0

1. Note: These are district indicators reflecting the amount of poverty within the school district.

   These percentages may be higher in the Chapter 1 population within each school.

2. Source: Census of Population and Housing, 1980, Summary Tape File 3F: School Districts.

Key for Racial Composition

B - Black
W - White
H - Hispanic
A - American Indian
O - Other

Table 2: Characteristics of Districts from which School or Project Level Programs were Studied

SITE	TYPE OF COMMUNITY	DISTRICT ENROLLMENT	PERCENT OF FAMILIES IN POVERTY 1,2	PERCENT OF STUDENTS RECEIVING FREE/REDUCED LUNCH	RACIAL COMPOSITION				
					B	W	H	A	O
Aynesworth School Fresno, CA	Urban	60,000	20.4	90.8	14	18	63	0	4
Kansas City, KS	Urban	23,000	20.5	42.0[1]	47	44	6	0	2
Topeka, KS	Urban	14,660	11.49	38.0[1]	18	74	5	2	1
Meramec Valley Pacific, MO	Small Town	3,340	8.7	22.0	2	98	0	0	0
Lincoln, NE	Urban	23,900	7.19	41.0	3	93	1	1	1
Broken Arrow, OK	Suburban	55,000	4.7	6.0[1]	1	95	1	2	1

1. Note: These are district indicators reflecting the amount of poverty within the school district.

These percentages may be higher in the Chapter 1 population within each school.

2. Source: Census of Population and Housing, 1980, Summary Tape File 3F: School Districts.

Key for Racial Composition

B - Black
W - White
H - Hispanic
A - American Indian
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Evidence of Effectiveness of Exemplary Chapter 1 Programs

Program effectiveness was defined as seven-month-to-two-year aggregated gain on standardized achievement tests. In general, the available data supported the nomination of these projects as providing exemplary service to highly disadvantaged populations.

Three types of evidence of group achievement gain were examined from nineteen of the twenty programs studied in this technical investigation. The first was traditionally defined evidence of effectiveness (TIERS Model A-1). Did the programs exhibit greater than expected pre- to post-test mean gain on standardized achievement tests? Did they exceed national and state mean gains?

Second, were other measures of quantified, single year achievement gain produced? An effort was made to gather a wide variety of additional evidence which would support or contradict the more standard measures of effectiveness. Where available, gain scores were examined at the student and program levels relative to pretest scores. Comparisons were made to local and state information. Score patterns across grades within projects were examined, as was evidence that the most disadvantaged students did or did not obtain the greatest benefits from the project. In districts with program objectives which were not referenced to an external benchmark (e.g. Model A-2), these additional measures were particularly useful.

Third was evidence of sustained effect. Using the measures chosen by the local districts, investigators examined evidence of sustained achievement gains.

For the purposes of analysis, compensatory education programs were divided into three categories: 1) programs using Fall-Spring testing with Norm Referenced Tests (NRTs) to gather their primary compensatory education evaluation data, 2) programs using Spring-to-Spring or Fall-to-Fall testing with NRTs, and 3) programs using other sources of quantitative achievement support.

The quantity and quality of available evidence varied among the projects. In each available case, quantitative achievement data provided moderate to very strong justification for describing the project as effective. Tables 3 and 4 present effect data from the projects. In both tables, the left hand column provides identifying information regarding the schools/programs, listed alphabetically. The center column provides aggregated data related to effectiveness; and, on lines marked "additional," supplementary evidence of single year effect. The right column lists evidence of sustained gain.

Within the programs providing comparable data, the unweighted mean gain for the ten Fall-to-Spring testing programs, 9.94 NCE's, was 45.5% greater than the national mean gain. Among the six Spring-to-Spring testing programs, the mean gain of 7.33 NCEs was 138.8% above (i.e., more than double) the national average. While variation existed in the quantity and interpretability of available data, all of the programs appeared to have had above average success, given their contexts. Some appeared to be extremely successful.

In districts which reported interpretable sustained effects studies, the data supported the effectiveness of the programs. Of the eight interpretable studies (analyzing Dillon's four as a single study), one documented no sustained effect (the Meramec, "in-in" study), one documented maintained gains (Arapahoe, WY.) and six, including the "in-out" study at Meramec, MO., documented continued growth after Chapter 1 participation, presumably a "springboard" effect.

It is possible that a reader of previous sections of this investigation would question whether all of the projects in the study were indeed serving a preponderance of high need students. From Tables 3 and 4 an additional table was constructed which focused on the projects serving the most clearly at need students within this study of programs serving highly deprived populations. Restricting the sample to projects serving only whole districts with 15+% of all families in the district below the poverty line and/or 50+% of all children, district wide on free or reduced lunch, produced new samples of projects serving "most clearly at need" populations. As can be seen in Table 5, the resulting six project sample (three in fall-to-spring and three in spring-to-spring testing cycles) obtained NCE gains which were greater than the study average and still further above the national average).

Table 6 presents information from three additional programs. Each program produced data which appeared to verify their nomination to exemplary status. The Aynesworth School (Fresno, California) and the Tacoma, Washington Chapter 1 program were particularly interesting, in that their data presented a strong case, and yet stood outside the traditional TIERS Model A-1.

Aynesworth appeared to be a highly successful whole-school approach to compensatory education. Third and Sixth-grade California Assessment Profile data on the whole school and on the compensatory education sub-population indicated that the Aynesworth students had, for three consecutive years, scored well above their predicted range.

In Tacoma, Washington the district used a locally developed Criterion Referenced Test (CRT) to evaluate the overall district's, each school's, and students' progress. The district's Chapter 1 evaluation rested on the assumption that a child who is benefiting from special services will gain a greater number of new competencies than the average child in the district. This would loosely translate to, "more than a year's gain in a year's time." This seemed to the visiting researcher to be a reasonable measure. It was a measure the Chapter 1 program had exceeded for three consecutive years.

Taken as a group, these studies provide strong support for the proposition that highly disadvantaged students can obtain and sustain significant achievement gains through high quality compensatory education programs. An initial effort to determine the processes through which these outcomes were achieved follows.

Table 3: Quantitative Evidence of Effectiveness in 10 Programs Using Fall-to-Spring Testing.

Program	Evidence of Gain	Evidence of Sustained Effect
Abilene, Texas	$\overline{X}$ gain = 8.1 ($\overline{X}$ pretest = 34.1)	Study documented continued growth
Arapahoe, Wyoming	2 yr. $\overline{X}$ gain = 14.2 ($\overline{X}$ pretest=32)	Students maintained gains
	additional: in 1985, only 1 student (a transfer), grades 4-6 had a pretest NCE = 20. Over 50% of students "graduate" from Chapter 1 before the end of the school year.	
Boise, Idaho	5 yr. $\overline{X}$ gain = 11.6	Continued gains for both Chapter tutees and non-Chapter 1 tutors
	additional: 4 lowest SES schools' gains exceeded district Chapter 1 mean gains. At those schools, students scoring lowest pre, obtained greatest mean gain. Very few pretest NCEs below 20 in grades 4-6.	
Carol County Mississippi	6 yr. $\overline{X}$ gain in Reading = 7.3 (pretest $\overline{X}$ = 33.5) 6 yr. $\overline{X}$ gain in Math = 7.5 (pretest $\overline{X}$ = 38.3)	
Louisville, Kentucky	2 yr. $\overline{X}$ gain in Reading = 7.5 (pretest $\overline{X}$ = 29) in Math = 16.5 (pretest $\overline{X}$ = 24.5)	
Meramec Valley, Missouri	$\overline{X}$ gain = 8.3 (vs. 7.4 state $\overline{X}$)	Continued gain for "graduates" No sustained gain for "in-in" group.
Ohio County, W. Virginia	3 yr. $\overline{X}$ gain = 8.2 (pretest $\overline{X}$ = 33)	
Portsmouth, Rhode Island	$\overline{X}$ gain = 12.3 ($\overline{X}$ pretest = 28.3)	
Pueblo, Colorado	3 yr. $\overline{X}$ gain reading = 6.8 ($\overline{X}$ pretest = 26.3)	Study focused on Preschool Impact
	additional: most at need students at most at need schools achieved larger than average gains	
Topeka, Kansas	3 school $\overline{X}$ gain = 10.3	

National Average Mean ($\overline{X}$) gains = 6.83 NCEs for grades 4-6 (Mean pretest = 32.4 NCEs)

10 Program Mean Gain = 9.94 NCEs (unweighted) = 144.90% of national average gain.

Table 4: Quantitative Evidence of Effectiveness in six Programs Using Spring-to-Spring Testing

Program	Evidence of Annual Gain	Evidence of Sustained Effect
Birmingham, Alabama	$\overline{X}$ gain = 5.6 (pretest $\overline{X}$ = 35.2)	Continued gain
Broken Arrow, Oklahoma	$\overline{X}$ gain = 10.6 (pretest $\overline{X}$ = 43.2)	Continued gain
	additional: in the Sustained Effect study, there were no students with Pretest NCE's between 0 and 9. Those 10-19 had X gain of 16.4, 20-29 X gain = 16.2. Those were the largest gaining groups	
Dillon, S. Carolina	$\overline{X}$ gain = 11.6 (S.C. $\overline{X}$ gain = 5.2) (Dillon pretest $\overline{X}$ = 11.8)	4 sustained effect studies, on average showing continuing gains
Kansas City, Kansas	$\overline{X}$ gain = 5.8	
	additional: Each year = 50% of students "graduate" from Chapter 1 before year's end.	
Lincoln, Nebraska	(2 schools) $\overline{X}$ gain = 4.0 (Dist. $\overline{X}$ gain = 4.53)	Studies of the entire district's Chapter 1 Program show continued gains
	additional: no students in grades 4-6 with pretest NCEs below 20. Largest $\overline{X}$ gains were among students with pretests in the 20-29 NCE (low) range.	
Red Clay, Delaware	2 yr. $\overline{X}$ gain in Reading = 2.6 (state $\overline{X}$ = 2.1)	
	gain in Math = 10.2 (state $\overline{X}$ = 5.3)	

National Average Mean ($\overline{X}$) gains = 3.07 NCEs for grades 4-6 ($\overline{X}$ pretest = 34.9 NCEs)

6 Program Mean gain = 7.33 NCEs (unweighted).
That mean gain is 238% of the National Chapter 1 Average gain.

Table 5: Mean NCE gains for High Need-exemplary projects, Highest Need Exemplary Projects and National Average

Type of Project	Fall to Spring Testing		Annual Testing	
	Mean NCE Gain	Gain as a percentage of National $\bar{X}$ Gain*	Mean NCE Gain	Gain as a percentage of National $\bar{X}$ Gain
Clearest Need Sample	11.20	164%	7.66	250%
High Need Study, Total Sample	9.94	146%	7.33	239%
National Average	6.83	—	3.07	—

*(Sample Gain/National Mean Gain) x100

1. Unweighted National average for grades 4-6 derived from Carpenter and Hopper (1985)

Table 6: Quantitative Evidence in 3 additional Programs

Program	Evidence of Gain
Aynesworth Elementary School, Fresno, California	Comp.Ed. Scores not separated from school scores on the district administered NRT. (A whole school approach.) School $\bar{X}$ on NRT had risen in 6 years from the bottom of the district to near the top in spite of the school's very low mean economic status. California Assessment Profile indicated that the school was achieving at a level well above its predicted range for both comp. ed. and regular students.
New London, Connecticut	Annual testing not received. A small sustained effect study presented evidence of a 20+ NCE gain, sustained.
Tacoma, Washington	Used a locally developed Criterion Referenced Test (CRT). The objective for Chapter 1 was to exceed the district $\bar{X}$ gain. For 3 consecutive years the program has done that. A sustained effect study indicated that the students maintained their gains.

Description of Effective Programs

Case studies were conducted at the 20 projects in a pilot effort to identify the characteristics which made these programs successful. There were some characteristics held in common in the programs studied. They included:

- o A belief that every child can learn,
- o A commitment to educating each individual child, and to providing a quality program,
- o Urgency – the leaders and teachers wanted to see educational results on a daily and weekly basis,
- o A determination to work on the program until it was successful,
- o Hard work and an attention to detail,
- o A Chapter 1 director who served as an instructional leader and coordinator,
- o At each site a majority of the "13 Attributes" identified in the Effective Compensatory Education Sourcebook (Griswold, et.al., 1986) appeared to be practiced.

Effective practices gleaned from the case studies replicate those found in similar studies of effective teachers (e.g. Brophy and Good, 1986; Stallings, 1980) schools (e.g. Purkey and Smith, 1983). There were, however, a few exceptions and additional practices that appear to be widespread among programs successfully serving highly disadvantaged students. In analyzing these practices, the researchers noted practices which were present at every site and which may be necessary for a program to be effective in serving the needs of educationally disadvantaged students. Likewise, the researchers noted practices which varied among sites and, therefore, did not appear to be essential to programs' success. The discussion of these practices is to be divided into four categories:

1. Leadership qualities and practices
2. School characteristics and practices
3. Instructional/classroom practices
4. Parental involvement

The most striking comparison/contrast to the school effectiveness and educational leadership research fields came in the area of leadership of the Chapter 1 programs. Many of the schools visited for the study had excellent principals. Others had adequate principals, and some of the principals did not appear to be notably involved or effective in their Chapter 1 programs. Yet all of the highly effective Chapter 1 programs had as their chief administrators, very active, effective, instructional leaders. It would appear that for Chapter 1 programs, the program, not the subordinate schools, is the

critical unit of analysis. The Chapter 1 coordinator, not the principal, is the critical instructional leadership position. The ideal situation, of course, would involve a strong, instructionally oriented, assertive Chapter 1 Director working in close coordination with a strong, instructionally oriented principal. But the *sine qua non* of Chapter 1 effectiveness was the instructional leadership within the compensatory education program.

While the projects' settings varied considerably, the staff directing the programs were similar in their management approaches. The leaders all possessed a vision that was based on the belief that virtually all of their students could learn. The leaders and teachers set a goal that each of their students would achieve to the best of his or her capabilities. Repeatedly, the leaders stated that, in striving to do their best, students could make more progress than would be predicted from their pretest scores or previous school performance. For example:

- The goal of the Chapter 1 Program in Carroll County, Mississippi was to help students move up to an average educational performance. The goal for each individual was to increase personal achievement by 10% over the gains the year before. In addition, all students were expected to score above a minimum score on criterion-referenced tests. The teachers were expected to do "whatever it takes" to help each student to meet this requirement.

- The overall goal of education in New London, Connecticut was to encourage all students to achieve at their fullest potential. Individualized Education Plans (IEPs) were established for each student by reviewing pre- and post-test results, reviewing folders which were maintained for each student, and by a very close monitoring of student progress. Good communication among regular and Chapter 1 teachers about goals, objectives, and the IEPs was maintained throughout the year. This furthered attainment of the desired outcomes.

- In Tacoma, Washington every Chapter 1 student was expected to show greater gain in the local criterion referenced test than the district average gain.

The Chapter 1 leaders were a determined to achieve the goals they had set. They possessed a sense of urgency: having set goals, they wanted to see steps towards accomplishment immediately. They communicated their goals and commitment to their teachers.

Their first step in accomplishing their task was to get the teachers to believe each student could learn. The next step taken by the leaders was to communicate their beliefs and expectations to the students, and to garner student commitment. The leaders made it clear that to accomplish improved reading and math performance, each teacher and each student would have to do his or her best. For example:

- The Meramec Valley, Missouri Chapter 1 teachers used many methods to communicate positive expectations about achievement to their reading students. When expected behavior and achievement were shown, special notes were sent home to parents. Positive expectations

and examples of achievement were communicated on a regular basis to the regular classroom teacher. Special privileges were used as a motivational device and to commend successful performance.

- A principal at an elementary school in Carroll County, Mississippi assembled all students in the auditorium each morning for a pep rally and gave the students a positive message about learning

- The Chapter 1 director in Dillon, South Carolina believed, and had documented, that the students are capable of much more than they were previously achieving. The Chapter 1 director endeavored to demonstrate that the students needed to believe that they could and should do well in school. First, he convinced the teachers, and then enlisted them in helping convince students and parents. Efforts included explaining the importance of standardized testing to the students. He helped interpret test scores, not in terms of post-test percentiles but in terms of growth. The students were told they were capable of improving their status, regardless of where they started, and were expected to do so.

- High expectations were the rule at the Tacoma, Washington Chapter 1 program. The director stated, "They (Chapter 1 teachers) believe they have impact. They simply assume that students can learn." In the classes the researcher observed, the teachers and aides transmitted that assumption to their students through their actions. They were task-oriented, and assumed that their students could keep up.

- The Chapter 1 coordinator in Birmingham, Alabama told an interviewer, "Our Chapter 1 program works because we expect it to. Principals expect the program to work. They know it works, because they've seen the student performance come up."

The leaders assessed the various components of the program, including methods, materials and staff, to determine which components were contributing to the progress of each student and which were not. The leaders used the findings to structure a program that would meet the needs of individual students. Although the individual programs that were visited appeared quite different from one another, they shared seven leadership team characteristics:

1. The leader's primary goal was that each student would learn. The objectives for the program followed from this goal and were communicated in writing to the teachers at the beginning of every school year. Handbooks were often developed that also included resources to aid the teachers in accomplishing the objectives.

- While the program leaders in Louisville, Kentucky did not appear to play a direct role in instructional decision-making, their support was evidenced in various ways, such as development of a correlation guide to align with the district's basal series and facilitation of on-going program refinement. Close contact with each Chapter 1 classroom was maintained through regular visits, at least biweekly. The program's high standards were reflected by the program's central office and building-level leaders alike.

2. The leaders well grounded in effective instructional techniques, functioned as instructional leaders.

- In Topeka, Kansas the coordinator and resource teacher made regular visits to Chapter 1 buildings to monitor instructional techniques being employed and to demonstrate new research-based instructional strategies. These demonstrations often occurred over several days with students of different grade levels. The coordinator and resource teacher talked with teachers informally regarding specific children who required a special technique or materials. They also solicited suggestions from teachers who had developed strategies that were particularly successful and which could be shared with other teachers. Finally, the coordinator and resource teacher conducted both formal and informal visits with all Chapter 1 principals throughout the year.

- The Chapter 1 director in Pueblo, Colorado maintained an active leadership presence. She revised the curriculum guide and the parent handbook. She observed every Chapter 1 teacher in this large district on a regular basis. If she saw something that a teacher needed to improve, she pointed it out and returned in a few weeks to monitor implementation. She sought out new ideas and new staff development opportunities.

- In Birmingham, Alabama each principal provided strong instructional leadership and had a good knowledge of the Chapter 1 program. The school system required this instructional leadership. Principals were responsible for scheduling Chapter 1 classes, the selection of Chapter 1 students, as well as 30 minutes of instructional observation every day. They reported on this to the superintendent each month. Principals rallied support for the Chapter 1 program from the community.

- The Chapter 1 director in Meramec Valley, Missouri had held the position for 15 years and was a full-time building principal at the middle school. He was able to implement needed staff development and oversee proposal development without intervening layers of administration. Ideas were freely exchanged between teachers and administrators. Good relationships existed among building principals, regular classroom teachers, and Chapter 1 staff. When interviewed, the principal attributed program success to the team concept and the willingness of Chapter 1 staff to devote extra time on their own.

- At Aynesworth School in Fresno, California, the "Super Kids" project coordinator tested every child entering the school. Children in danger of falling behind were monitored on a regular, often weekly, sometimes daily basis.

3. The directors employed highly-qualified, experienced teachers. They gave their teachers support and encouragement for providing quality instruction. They took staff development seriously. Teacher needs were assessed and effective training strategies were used. Both formal and informal staff support systems were in place: there were regularly scheduled training sessions and faculty meetings as well as time set

aside for teachers to plan together. The teachers became believers in the program. An emphasis was placed on sharing among teachers.

- o Many of Tacoma, Washington's highest quality, experienced teachers applied for Chapter 1 positions. Chapter 1 staff turnover was substantially below the district average. Staff development was not so much targeted at remediating weaknesses as it was at building new strengths. The director largely avoided having to deal with weaknesses by hiring very carefully. When staff development failed, however, he would quietly move the problem teacher out.

- o In Birmingham, Alabama teachers reported enjoying teaching in the Chapter 1 program. Assignment to Chapter 1 was considered a positive move, because only highly capable teachers were offered Chapter 1 positions. Chapter 1 teachers often served as models for the teachers in whose classes they provided services.

- o In Broken Arrow, Oklahoma teachers received notes of appreciation and verbal praise from the Chapter 1 coordinator for outstanding contributions. Several Chapter 1 teachers have received awards of excellence given each month by the Chamber of Commerce.

- o A special aspect of the professional development component of the Red Clay, Delaware program was the required in-service by all Chapter 1 staff. Each staff member was required to provide at minimum one in-service training session at the school level for staff or parents. This practice provided another vehicle for close communication and sharing of curriculum and instructional ideas between regular and Chapter 1 staff. Moreover, Chapter 1 staff were involved in all of the district and school level curriculum and planning committees.

4. Leaders held teachers accountable for students' learning, requiring that time be used for instruction and providing for instructional planing time.

- o The Carroll County, Mississippi Chapter 1 teachers endeavored to keep their students up with the students in the regular classroom so that they would remain on grade level. Teachers planned well and prepared materials in advance so that the class periods were devoted solely to teaching. Principals monitored this process by signing lesson plans each week.

- o The researcher's measures of time-on-task at Arapahoe, Wyoming demonstrated the academic focus of the project. Little time was wasted and teachers closely monitored students' attention to academic tasks. Teachers actively instructed, and students, for the most part, attended to the instruction.

5. Regular, often formalized coordination between the Chapter 1 and regular classroom teachers was mandated. The education of disadvantaged students was seen as a school-wide responsibility – not solely a Chapter 1 responsibility.

- The Carroll County, Mississippi Chapter 1 teachers coordinated closely with regular classroom teachers through written communications, scheduled planning times and informal encounters. The last period of each day was set aside as the Chapter 1 teacher's planned period. This gave the Chapter 1 teachers an opportunity to meet with each other and with regular classroom teachers. In addition, one day a month was set aside as a common planning time.

- In New London, Connecticut there was a clear division of principal/project director responsibilities and a close working relationship to ensure successful implementation and monitoring of the project. Communication among project staff, building principals, the project director, the Chapter 1 department head, and regular classroom teachers was encouraged on a daily basis and was incorporated into both monthly administrative council meetings and weekly department head meetings.

- In Birmingham, Alabama; Abilene, Texas; Ohio County, West Virginia; Tacoma, Washington; and Topeka, Kansas, the Chapter 1 and regular programs worked from the same sets of objectives:

  a. In Tacoma, Washington each school was required to focus on district-wide Student Learning Objectives. Schools were free to choose their methods, but their objectives were not allowed to vary. Curriculum articulation within schools was directed by the principal and the Chapter 1 teacher.

  b. System-wide committees in Birmingham, Alabama set objectives and chose materials for each grade level. Students worked on the same skills in their Chapter 1 and regular classes. The regular classroom teachers were responsible for seeing that each of the students in his/her class mastered these objectives, and for guaranteeing that each received a "double dose" of instruction. The basic skills teacher, Chapter 1 teachers, and coordinating teachers planned instruction together using a weekly planning form.

  c. The materials used in Abilene, Texas were closely matched with school objectives which were drawn from the Texas list of Essential Elements. Each fall, the Chapter 1 personnel were given a preview of the regular curriculum for the upcoming year. Each week, the regular classroom teachers informed the Chapter 1 teacher as to the methods and materials which would be taught. Daily written communications were sent to the Chapter 1 teachers concerning each student's work in the regular classroom. The Chapter 1 teacher sent weekly progress reports to the regular classroom teacher. In special cases, daily information was transmitted regarding student progress on particular objectives. Every six weeks, Chapter 1 teachers conducted formal coordination meetings with the regular classroom teachers. Regular teachers scheduled visits to the Chapter 1 classes to observe their students at work.

d. In response to evaluation results, Lincoln, Nebraska developed a district Chapter 1 management system. The management system allowed Chapter 1 and classroom teachers to work toward the same instructional objectives. Coordination was conducted on an individual student basis and provided a flexible set of procedures which included:

(i) procedures for more effectively involving classroom teachers in the selection of Chapter 1 participants,

(ii) the use of Individual Education Plans which were developed jointly by classroom teachers and Chapter 1 teachers, and

(iii) the careful sequencing of activities to ensure effective coordination.

e. In Ohio County, West Virginia coordination activities, such as developing lesson plans and modifying instructional objectives or strategies, took place daily. Chapter 1 and regular classroom teachers jointly developed an IEP for each Chapter 1 student. The plan was designed to be dynamic in the sense that it was reviewed and modified by both of these teachers throughout the course of instruction. Using these IEPs, subjects were "pretaught, taught, and retaught," resulting in a high rate of Academic Learning Time for the students.

f. In Topeka, Kansas, closely monitored student progress enhanced the communication and coordination between the Chapter 1 teachers and regular classroom teachers. Through Personalized Education Programs (PEP), classroom teachers communicated students' needs to Chapter 1 teachers. These forms provided the Chapter 1 teacher with specific objectives for the Chapter 1 students. The PEP's brevity, simplicity, and the ease of use contributed to its success.

6. The leader constantly monitored the program for success with emphasis placed on instruction. This monitoring was conducted through classroom visits and close examination of student progress data. The program was adjusted as a result of the monitoring. Once successful practices were in place, they were maintained and formalized.

o In Abilene, Texas student progress was monitored daily, checked with the student, then reported to both the regular classroom teacher and the parents. A weekly report of student progress was shared with the classroom teacher.

o In Meramec Valley, Missouri the Chapter 1 classroom used the district's instructional management system, the multi-program record-keeper, instructional contracts, diagnostic probes, motivational charts, and progress reports to continuously monitor individual student progress. As objectives were introduced and mastered, each student's reading objective card was updated by computer. Before beginning any given

lesson in the Tutorial Comprehension Program, students entered their names and student codes; the multi program record-keeper then automatically posted the results of their performance to their student records. The teacher could access any of these records and receive reports on individual or class performance. Student progress reports were generated by the computer and sent home on a quarterly basis. Instructional contracts are sent home weekly to provide an ongoing report of student progress.

- The Chapter 1 staff in Pueblo, Colorado has been through two programs that focus on increasing academic learning time. When the director visited classes, she measured students' percentage of time in interactive and non-interactive instruction. She accepted nothing less than hard work from her teachers and students. She also studied the test and subtest scores of every Chapter 1 student in the district. Which group/grade/school was/was not showing gains? What could be done about it? Her conclusions, together with parent and staff surveys, formed the basis for the following year's instructional focus.

- During in-service meetings in Topeka, Kansas Chapter 1 office staff and teachers studied the results of the pre-test to determine both individual and group instructional strengths and weaknesses. The staff regularly evaluated the design of forms, reference manual, computer management system, and in-service training to provide meaningful feedback to the schools. Evaluations have assisted in the improvement of the design of the Chapter 1 project in the following ways:

  (1) The staff directly responded to student needs as indicated on evaluation results. Reading comprehension was emphasized.

  (2) The computer management system was expanded to better meet the diagnostic/prescriptive needs of students.

  (3) Forms and reference manual were revised in response to project changes and teacher recommendations.

  (4) Each teacher was supplied with a CAT-C Class Management Guide that outlined strategies to be used in teaching the skills which were tested on the CAT.

  (5) The district's minimal competency program was supplemented by encouraging Chapter 1 teachers to address the objectives on the state minimal competency test.

7. Finally, the leader discontinued those methods, materials, and staff that were not effectively meeting those needs of the students.

- During FY'86, one school in Boise, Idaho had the opportunity to obtain CCC computers and software for their Chapter 1 students. The teachers took a training course, and the students used computers instead of peer tutors (the standard delivery system) that year. If, at the end of two years, the computers are doing as well as the tutors at

no extra cost, that school will continue using computers, and other schools will be free to participate. If not, the school will return to peer tutoring.

- Several years ago, language master machines were acquired in Meramec Valley, Missouri, to provide low cost learning stations for sight word and vocabulary development. The daily practice provided with the machines proved to be effective. During the 1983-84 school year, a Chapter 1 teacher designed a computer program to produce practice cards, study sheets, and tests. A microcomputer was used to implement the program in a pilot site with the result that the number of words taught and mastered nearly doubled in the pilot site. This provided the impetus to reexamine the Chapter 1 reading program and to explore computer applications for increased effectiveness.

- Tacoma, Washington's upper grades' Chapter 1 math students had not met the Chapter 1 goal for two consecutive years. Chapter 1 teachers were made aware of this problem and efforts were being made to improve the situation. If those school-level efforts did not produce results during FY'87, upper grade math was to become a district-wide Chapter 1 in-service focus during FY'88.

School and District Practices

The focus of the Technical Investigation was the characteristics of effective of Chapter 1 programs. The programs were, however, nested within districts and cross-thatched with schools. The TAC site visitors frequently commented on the degree of support and coordination local administrators and principals reported for their Chapter 1 program.

It is methodologically not within the capability of a cross-sectional study to determine whether skilled Chapter 1 leadership and general program excellence produce local admiration and respect, or local respect causes excellence. Yet it was the impression of the research team that, in many projects, program quality produced widespread respect.

It appeared that there were as many cases of excellent Chapter 1 programs improving a school as there were cases of excellent schools improving Chapter 1. Clearly the ideal situation involves a union of excellent district administration, excellent schools, and an excellent Chapter 1 program all working for the good of students. Failing that, evidence indicated that exemplary Chapter 1 programs can exist within less than effective schools.

Instructional/Classroom Practices

A common feature of the Chapter 1 programs visited was a focus on the needs of individual students. A variety of methods and materials was used within and across programs. In general, teachers strongly believed in the effectiveness of the methods and materials in place within their programs. There was no set of methods or materials that was used consistently among the programs studied. Rather, there were similar project characteristics:

1. The programs were all dedicated to teaching individual students.

o In Topeka, Kansas teachers focused on individual needs in the Chapter 1 small group setting and the matching of children's unique needs to materials. Teachers were constantly challenged to be sensitive to students' strengths and weaknesses. If a student did not respond to one approach, a variety of resources was available from which to choose another set of materials. The Carbo Reading Styles Inventory was used to assist in diagnosing a student who has not responded to traditional remedial techniques. Methods and materials were judged "good" if they fostered on-task behavior and result in improved performance.

2. The programs used diagnostic-prescriptive or mastery type models of instruction.

o Every new student at Aynesworth School in Fresno, California underwent a multi-step diagnostic process before being placed in a class. The steps were:

(1) initial assessment in reading, language, and mathematics by curriculum lab personnel,

(2) evaluation of the initial assessment by the program management,

(3) conference between the program manager and the parent(s) about the new student,

(4) observation of the new student by the classroom teacher,

(5) comparison of previous school records with current assessment and observations, and

(6) final placement.

o In Kansas City, Kansas the Chapter 1 reading and math instruction took place in a learning center environment. The learning centers consisted of independent student carrels, each equipped with a tape player, a headset, a marking pen, response sheets, and student booklets. Computers were replacing tape players in some of the learning centers. The programs used in the center were designed to provide individualized, self-paced instruction with active learner response and immediate feedback. Students were trained to gather the materials needed to complete their assignments. When a student needed help, a teacher or aide was signaled to come to the carrel.

- The Chapter 1 staff in Meramec Valley, Missouri tracked the progress of every student toward mastery of identified objectives through a reading objective card that was maintained in the permanent record. As objectives were introduced and mastered, cards were updated.

- Each Chapter 1 student selected by the Red Clay, Delaware program was given an extensive diagnosis to pinpoint strengths and weaknesses. An IEP was developed in conjunction with the regular classroom teacher, parents, and the student. This individualized plan was used to determine instructional skills and the modality for instruction, and was monitored closely to determine if instructional goals and objectives were being attained. Since the IEP contained not only skills that were to be mastered by also materials to be used, the regular teacher and Chapter 1 teacher were able to plan and coordinate skill instruction.

3. Diagnosis, prescription planning and delivery of instruction and evaluation of student progress were integrated into continuous, interlocking processes.

- In Meramec Valley, Missouri direct teacher instruction began the first week and was followed by practice at a functional reading level. The practice materials also served a diagnostic purpose, indicating where reteaching or more practice was needed on a specific skill. If students mastered a particular skill at a given level, they moved to the next level. Student contracts direct students and their parents on work for one week at a time and help the teacher track student progress on a daily basis.

- New London, Connecticut's IEPs contained diagnostic and prescriptive information, instructional goals, skill objectives, evaluation criteria, a list of instructional materials which could be used to facilitate the supplemental instruction, and a time schedule for the proposed instruction.

- Since student needs are the basis of the program with Red Clay, Delaware, IEPs were used not only to determine the specific needs of individual students but also to coordinate curriculum, plan in-service and professional development, and to evaluate overall program progress.

  Through review of IEPs, Chapter 1 regular staff determined the types of instructional techniques to be used. Progress was monitored regularly, changes in curriculum materials and instructional techniques occurred with ease. This practice permitted staff to address the unique and changing needs of the students. These profiles also served as an assessment for teacher in-service, in that they indicated areas for training in different techniques and/or in new materials. At a school, grade, or district level, IEP information was used to determine areas in need of professional development.

4. Lessons were structured to provide success and challenge.

o In Abilene, Texas students were rotated between instructors and machines so that students worked with all instructors. Individual differences were taken into consideration first in assigning a student to a teacher or a machine when working with a new skill. Students progressed through sequential skills and worked at a challenging level. Students were required to manage their own materials and transitions, and taught to maximize their learning time.

o The individualized format of the instruction in the Kansas City, Kansas Chapter 1 program and the diagnostic test/placement feature which placed students on an appropriate level of immediate success contributed to student progress. The learning center format enabled the Chapter 1 program to accommodate a large number of students in a cost effective manner. The step-by-step instructions, active responses, immediate feedback, and self-pacing design enabled the teachers to tutor students who needed special help.

5. Students' progress was closely monitored.

o Assessment of student needs in Arapahoe, Wyoming is so ongoing and exacting that their intake process had become a model for the state. Once students were admitted to the Chapter 1 program, their progress was monitored by a team which included the regular classroom teacher. Informal discussions of each child's progress were held at least weekly.

o In Dillon, South Carolina each student received daily written feedback of progress.

o In Kansas City, Kansas teachers monitored student progress using a recording system called a Weekly Center Report. Hourly entries describing each student's mastery of skills were written into a permanent record. Pilot computer record-keeping systems were being used in some learning centers. Teachers checked the report daily to determine the degree of success of each student. In addition, the teacher and aide listened to the taped lessons with students, tutored individuals, and discussed the lessons with the students. If materials, methods, or approaches appeared to be ineffective, adjustments were made. In addition to the immediate feedback students received, teachers and aides checked completed response sheets for mastery. Student points earned for 90% mastery of the lesson were accumulated and exchanged for rewards such as free time, certificates, and pictures. Upon completion of designated skill levels within the program, a letter was sent home to the parents.

6. There was frequent use of praise and rewards associated with the accomplishment of instructional objectives.

o The Abilene, Texas students received a variety of rewards, including rewards for satisfactory completion of their work, stickers for mastering an objective, ribbons for mastering goals, student-of-the-month posters, student work displayed on bulletin boards and lavish praise, smiles and touches.

- In Broken Arrow, Oklahoma happy notes reporting good work were sent home to parents and students received awards such as popcorn parties, award certificates, stickers and badges.

- Students who met their annual educational goals in Dillon, South Carolina were taken on a field trip.

7. There was frequent and intensive coordination between the Chapter 1 program and the regular classroom program.

- In Portsmouth, Rhode Island Chapter 1 teachers had two primary functions: they acted as supplementary remedial teachers to the students and as consultant/resource persons for the classroom teachers. Chapter 1 and regular classroom teachers jointly developed a prescription or course of instruction for each student in the project. Instruction was provided individually, in small groups or within the student's regular classroom. Chapter 1 teachers worked on the same concepts, using the same materials as the classroom teachers. The Chapter 1 teacher provided advance organizers and reteaching of the concepts and skills presented in the regular classroom. The diagnostic, prescriptive, remedial approach used was not seen as a separately functioning project but rather as an integral part of the total school program.

8. Many of the Chapter 1 projects used nationally recognized approaches such as Assertive Discipline and TESA (Teacher Expectations and Student Achievement), as components of their projects.

This section has concentrated on the similarities between the programs in the study. Several widely discussed factors varied among the programs studied. These included:

- Student/teacher ratios,

- The delivery system used – tutorial, laboratory, pull-out and in-class programs were all represented,

- The presence of instructional aids such as computers, instructional television, and tape recorders

Those three factors often varied within programs. It was not unusual to find varying delivery systems in different schools or at different grade levels within a school. In the districts offering variety, instructional objectives and expectations remained constant. The skilled leaders managed the diversity well.

Parental Involvement

In general, parents were encouraged to be actively involved in their children's instruction at home. Open letters were frequently sent home explaining the reasons the children had been selected for Chapter 1, the goals and objectives of the programs, the activities in which the student would be involved, and the expectation that the student would profit from being in the Chapter 1 program. The letters often conveyed expectations for the parents and their children which included getting proper rest and nutrition, attending school, and doing homework. In many programs, daily, weekly or quarterly progress reports were sent home with examples of the student's work. These communications tended to be specific and focused on progress toward measurable instructional objectives. Most projects invited parents to formally and informally visit school. Workshops were often provided to parents to help them teach their children at home.

- In Portsmouth, Rhode Island parents were contacted and interviewed prior to their child's participation in the project. During the course of the year, a minimum of two additional meetings were held with parents. Additional meetings were scheduled as needed.

  Parents were not only involved in assisting with the program of instruction for their own child, but contributed to the overall planning and evaluation of the project. Parents were involved in a ten week program called The Parent Study Group. This program was undertaken to help parents get a better understanding of their children and their behavior. The goal was to improve chances for the child to function more effectively at home and at school.

  Finally, Portsmouth offered a Volunteers-in-Schools (VIS) program which trained participants as reading tutors. Participants included parents and other community persons. Once trained, VIS tutors worked closely with the reading teacher.

- Dillon, South Carolina parents were invited to the Chapter 1 lab to work with their children on assignments. Student work was sent home daily. Announcements of skill mastery were also sent home. Newsletters which included activity sheets to be worked on at home were sent to parents. Parents received an activity calendar with math and reading activities to be done at home. Games which reinforced newly acquired skills were sent home for the parents to play with their children. Dillon offered a computer-take-home program. Parents were taught to use computers so they could work with their children, reinforcing newly acquired skills.

- Chapter 1 parents in Carroll County, Mississippi were invited every year to a special open house where the Chapter 1 students perform. During the 1985 school year the students presented "Books Alive". Each child dressed like one of the characters from a book he/she had read and told about the character. The school was packed.

- Topeka, Kansas parents were regularly involved in their children's Chapter 1 instruction in a variety of ways. Teachers sent home completed class work, books and stories to be read with parents, and

word lists to be studied/discussed. Teachers also sent personal progress information home on a continuing basis, made periodic phone calls, and met with parents during parent-teacher conferences

- Birmingham, Alabama parent education teachers conduct seminars to train parents to instruct their children. In 1984, 3,950 parents were involved in these seminars. Parents received copies of the system's skills for reading and mathematics. Chapter 1 parents also volunteered as tutors, chaperones for field trips and for classroom clerical duties.

- Broken Arrow, Oklahoma parents were sent a variety of materials, including:

  - A weekly activity report which included activities to reinforce newly-acquired skills,

  - Booklists and suggestions for math activities which could be done with everyday events such as cooking,

  - Teacher made materials,

  - A project calendar which encouraged parents to record the amount of time they read to their children each day. Reports of this time were periodically sent to the teacher,

  - Fact master guides to encourage parents to work on math facts with their children,

  - Weekly progress reports, which parents reviewed, signed, and returned.

"Make and Take" workshops were held for parents twice a year. Some parents volunteered to work with students in the classroom.

Topics Requiring Additional Investigation

Perhaps the greatest use of the current effort will be as a progress report on an evolving study. The knowledge gained in this phase can be used to develop a more refined study in the coming fiscal year.

Three issues clearly require additional study:

1. The psychometrics of effectiveness.

   The programs employed widely varying techniques to document their effectiveness. A more nearly standard metric needs to be agreed upon within the study, the relevant data gathered and analyzed. This should include standardized sustained effect data, gathered at the student level.

   Although the projects tended to analyze their data within the traditional TIERS Model A-1 format, the data they provided offered rich sources for speculation. Some exploration of that data will be presented here. The purpose is to present four propositions for further analysis. In each case, the propositions were suggested to one or more of the authors while analyzing subsets of the data in the current study. In a separate paper (Stringfield and Davis, 1987) several scenarios were presented in detail to examine the propositions, all derived from this study, and all needing further analysis in a second phase of this study.

   A. Gains should be analyzed relative to pretest means. In general, programs with pretest means between 30 and 40 NCEs exhibit significantly greater gains than programs with pretest means below 30 or above 40 (Gabriel, 1986.) On both pretest and gain, a highly effective Chapter 1 program serving a highly disadvantaged population may appear similar to a middle class school's mediocre program.

      Gabriel's (1986) reanalysis of the Sustained Achievement Study (Gabriel et.al, 1985) indicated that programs with particularly low pretest means produced, on average, smaller gains at the program level than higher-pretest projects. One implication of this would be that programs employing exemplary practices in the service of highly disadvantaged students might produce achievement gains that were simultaneously exemplary given their district population, and yet not extraordinary in comparison to a larger national population.

      Data from three districts in the study were relevant to this finding. Pueblo, Colorado's three-year mean gain was at the overall national average. But compared to programs with pretest means between 26 and 30 NCE's, Pueblo's gains are four NCE's above (i.e., triple) the national average.

      A similar situation apparently existed in Lincoln, Nebraska. The two schools deemed exemplary at serving the particularly

economically disadvantaged had a lower mean gain than the district average, but were beginning from a much more disadvantaged base.

The Gabriel analyses make the Spring-to-Spring mean gains of 11.6 NCEs at Dillon, South Carolina all the more remarkable.

B. Gains should be evaluated relative to school and state means. A modest absolute gain in a state in which test scores demonstrated very little gain during each of several consecutive years may have substantially different meaning than a small gain in a state with stable to rising scores.

The Arapahoe, Wyoming Chapter 1 program produced nearly double the mean gains of Carroll County, Mississippi. It seems reasonable, however, to evaluate this difference in light of the fact that Wyoming perennially achieves greater Chapter 1 mean achievement gains than does Mississippi. The two projects could both be considered to be performing exemplarily relative to their respective states.

C. Under many circumstances, mean pretest score patterns across grades may be a better indicator of sustained effect than "gain" scores. In a highly effective compensatory education program, the number of non-transient students performing very poorly academically should decrease as students progress up the grades.

Some data can cast light on the longitudinal effect of "effective" programs. In Arapahoe, Boise and Lincoln, data available at the student level indicated that these mature, successful programs had very few (1, 3, and 0 respectively) students in grades 4-6 with pretest NCE's below 20. These programs were sending very few illiterate students forward to junior high schools. The Chapter 1 programs were having an extended, compensatory effect.

D. In a program focused on equity, an excellent Chapter 1 program might be expected to produce greater within school mean NCE gains for the most disadvantaged students. Evidence from several programs in this study indicated such a pattern.

For the equity production question, a comparison was drawn between programs raising all Chapter 1 students equally and those focused particularly on the most disadvantaged. Individual student level data at Arapahoe, Aynesworth, Boise, Broken Arrow, Lincoln and Pueblo indicated that in those schools/districts, the most disadvantaged students were, on average, obtaining the greatest gains.

Note that at the school or district level, all of these programs except Pueblo had pretest means in the 32-43 range for the grades studied and, as such, would have appeared "only moderately disadvantaged" in the Sustained Effects Study (Carter, 1984) analyses. As the demographic data of these programs indicated, however, Arapahoe, Aynesworth, Boise,

Pueblo and the others were, in fact, considerably *economically* disadvantaged. Quite possibly due to the long-term effectiveness of the Chapter 1 programs, the students pre-test scores did not indicate a pattern of extreme *academic* disadvantage.

2. The processes of effectiveness

Several of the conclusions of the current phase lack the richness that extended site visits generally, and qualitative data gathering in particular can provide. Additional time within selected projects would be necessary to gain such dividends.

Process data should have three foci:

a. Chapter 1 Classroom Processes - data should include quantitative, low- and high-inference classroom observations using previously developed observation systems (e.g. the Stallings Observation System, modifications of the Rosenshire, and measure used during the Whole Day Study). Qualitative in-class data also should be gathered and analyzed.

   Comparisons and contrasts will be drawn between these data from exemplary projects with those from studies of representative projects.

b. Regular Teachers and Administrator's Perceptions of Chapter 1 program quality. Interview and questionnaire (NWREL Chapter 1 Self Assessment Questionnaire) data

c. Chapter 1 Administrator's Activities and Attitudes Should Be Assessed.

3. The process of growing to effectiveness

How did these programs get to be effective? How can others follow suit? Under what circumstances would they recede to mediocrity? To date, the research team has gathered no systematic data on the central point of change.

The data in this section is clearly speculative in nature. The four psychometric outcomes of mature effective programs hypothesized as 1.a-d above are drawn from small subsets of a 19 program sample. They can provide points for departure for future study, not firm rules.

The issue of processes of developing and sustaining an effective compensatory education program can be addressed only through additional study.

For the coming fiscal year, Phase II of the Technical Investigation proposes a study with the following characteristics:

1) Sample:

Eight projects, to be taken from the current 20 project sample, to the extent possible. Projects must present psychometric and process indications of exemplariness, while serving a highly educationally disadvantaged population.

2) Data requirements:

a: Achievement. The project must be able to supply student level, norm referenced achievement data on all students. Multi-year data must be available on a significant percentage of students.

b: Other Outcome Data. The greater amount and variety of non-achievement data the program has gathered, the more seriously they should be considered for inclusion in the second phase of the study.

c: Educational Processes. The project must be visited for at least three days by a member of the research team, for the purposes of gathering information relevant to the thirteen characteristics of effective compensatory education programs, and other data.

3) Analyses:

Two aspects of the data gathered will be of particular interest to the Technical Investigation team. The first will regard the psychometric properties of effectiveness in projects serving extremely academically disadvantaged populations. Four potential measures beyond TIERS Model A are described earlier in this paper. Are these consistently present in such projects? Are they more effective measures than simple Model A gains?

Second, under closer scrutiny, to what extent are the educational processes described earlier in this study descriptive of highly effective programs for disadvantaged students? In extended observations and interviews, do additional variables prove vital? In those same interviews, does a constant pattern of program development emerge? Did the programs follow similar, traceable paths to exemplary status?

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EFFECTIVE COMPENSATORY EDUCATION PROGRAMS FOR EXTREMELY DISADVANTAGED STUDENTS

Appendix:

Descriptions of Exemplary Programs

BIRMINGHAM, ALABAMA

Birmingham, Alabama is an urban, industrial area. The primary industry is steel production. The families are highly mobile within the city but there is little mobility out of Birmingham. Twenty percent of the school population moves during the school year. Such that it necessitates a change in schools. Birmingham City Schools served 44,277 students during the 1984 school year. Birmingham serves an inner city population that has a high concentration of economically disadvantaged families, primarily single parent families. 81% of the school population is black, 30.9% of school children in Birmingham live in families whose income falls below the federal poverty line, 70% of the students qualify for free lunch. Despite these disadvantages, Birmingham's performance on standardized tests is about average for Alabama and the nation. Birmingham has a participatory government that encourages citizen involvement. The schools are also open and there is active community support for education.

Our Chapter 1 program works because we expect it to. Principals expect the program to work. They know it works because they've seen the student performance come up. They've meshed the Chapter 1 program with the general program, so the Chapter 1 teachers don't feel stigmatized

Parents in Birmingham have high expectations for their children. They believe their children can accomplish anything and that education is the key to success. They also hold strong religious and moral values. Despite these values, many students come to school ill prepared to learn. They have limited language or motor skills and have had little exposure to such things as books, scissors or pencils. They don't know how to follow directions, their frustration level is very low and, they need immediate assistance and feedback. But Birmingham students are street wise and have a lot of untapped resources, because they're surrounded by a very stimulating environment.

The Chapter 1 program is only able to serve 40% of the students who score below the 50 percentile on selection tests. In 1985, 14,000 students were served in grades 1-8 in 57 schools, both public and private, for an average per pupil cost of $664.48. In 1984 the average pretest percentile for reading in grade 4 was 16 and for grades 5 and 6, 4. For mathematics the average pretest percentile for grade 4 was 18, for grade 5, 16, and for grade 6, 11. The goal of the Chapter 1 program is for the students to attain a mastery of basic skills in reading and mathematics. An annual needs assessment is conducted to determine the students' greatest needs and students are selected for Chapter 1 based on standardized test scores. Each Chapter 1 program component is designed to interface with the basic instructional programs so that Chapter 1 students receive extra assistance to meet districtwide reading and mathematics performance objectives.

The Chapter 1 program is provided in the regular classroom, with the Chapter 1 teacher working with small groups of students. The basic skills teacher, Chapter 1 teachers and coordinating teachers plan together for instruction using a weekly planning form. Students work on the same skills in their Chapter 1 and regular classes. System-wide committees set objectives and choose materials for each grade level. The regular classroom teacher is

responsible for each of the students in her class mastering these objectives and for guaranteeing that each receives a double dose of instruction. She is assisted by the Chapter 1 teacher who uses supplementary equipment and materials and a variety of methods to reinforce the regular classroom instruction. Students are grouped by individual academic deficiencies and skills are taught through an individualized diagnostic prescription process.

A locally designed essential skills management system is used to track individual skills and progress. It is used weekly to assess a student's status and to plan for the next week. A variety of other methods are also used to assess and report student progress including teacher observations, report card grades, criterion and norm referenced tests and a Chapter 1 survey. The information from all these sources is used for long range planning and evaluation of methods and materials. Students receive frequent feedback on their progress and positive reinforcement for progress.

Teachers enjoy teaching in the Chapter 1 program. Assignment to Chapter 1 is considered a positive move, because only highly capable teachers are assigned to Chapter 1. All Chapter 1 teachers are certified, most have a masters degree or higher. Chapter 1 teachers often provide a model for the teachers in whose classes they provide Chapter 1 services. Chapter 1 aides are also used in some of the classrooms. They function as aides, not teachers, and receive close supervision from a certified teacher. They are responsible for carrying out plans made by that teacher.

Each student is challenged to meet district-wide attendance, grade and test performance criteria for promotion and is encouraged to participate in academic competitions such as honor rolls, academic bowls, spelling bees, poetry contests, media fairs and essay contests. Chapter 1 students are required to meet the regular school standards of achievement and behavior. Students are rewarded for their performance by smiley faces, praise, stars, happy grams, notes of commendation, and end of year recognition certificates for high achievement and increased progress rates. Student work is also posted in classrooms.

Each principal provides strong instructional leadership and has a good knowledge of the Chapter 1 program. The school system requires this instructional leadership: principals are responsible for scheduling of Chapter 1 classes, the selection of Chapter 1 students as well as 30 minutes of instructional observation every day which they report to the superintendent each month. Principals also rally support for the Chapter 1 program from the community. The principals are responsible for supervising the Chapter 1 staff. Program quality is also assured by monthly visits to each school.

Staff development occurs primarily through staff meetings. Initially there are staff meetings to inform the staff of the content of the curriculum. There are also monthly meetings of Chapter 1 staff which are used for problem solving. When there are specific problems to be solved, after school staff meetings are held to deal with the specific problems. There are also preservice and inservice staff development training sessions. Many teachers are members of professional associations. Occasionally teachers make onsite visits to classrooms in other schools.

Parents are very actively involved in the Chapter 1 program. Each year a mini workshop is held to explain components of the Chapter 1 program to parents. There is a Parents Advisory Committee (PAC) that provides information to parents and holds monthly meetings. PAC representatives also visit the schools regularly. There is an annual district-wide workshop on topics suggested by parents and a "Handbook for Chapter 1 Parents". All of these meetings are well attended by parents. In addition, parent education teachers conduct seminars to train parents to instruct their children. In 1984, 3,950 parents were actively involved in these seminars. Parents also receive copies of the system's skills for reading and mathematics. Chapter 1 parents also volunteer as tutors, chaperones for field trips and for classroom clerical duties.

AYNESWORTH SCHOOL, FRESNO, CALIFORNIA

Aynesworth school is in the Fresno School District, and has been allowed to develop its own compensatory system. The free and reduced lunch count at Aynesworth stands at 90.8% It is a tribute to the principal and staff that the school does not have the "feel" of an economically deprived school.

Aynesworth school's student population is 18% white, 63% Hispanic, 14% Black and 4% Asian. None the less, the school's test scores are among the highest in the district, and Aynesworth is a rapidly growing school in a shrinking district.

The Aynesworth Elementary School compensatory education program is not a district-wide program, rather it has developed, with district support, a unique model. For 2 consecutive years Aynesworth has been named an exemplary compensatory education program by the State of California.

Three things that made Aynesworth exemplary:

1) An enthusiastic administration backing a sensible, largely teacher developed program.
2) An exhaustive diagnostic process for <u>every</u> new student.
3) A commitment to subject mastery that absolutely pervades the school. The staff closely identifies it's very self with this goal. Teachers struggle to push their students forward.

The principal has a remarkable ability to make people feel good about themselves and their accomplishments. He does this with staff, teachers, students and parents. His enthusiasm is contagious. It is also the case that, behind his remarkably up-beat exterior, the principal is a man who knows quality teaching, and had fired or otherwise passed on teachers who did not get the job done in his school. Within the velvet glove, there rests an iron will.

The principal had his staff develop, and continue to refine an instructional program that has raised Aynesworth's test scores from the bottom of the district to among the top. The staff believe in their principal, their compensatory education leaders, their curriculum, and the process they have in place for continued self-evaluation and improvement.

2) Every new student at Aynesworth undergoes a 7 step diagnostic process before he is placed in a class. The steps are:

    1) Initial assessment in reading, language, and mathematics by curriculum lab personnel.
    2) Evaluation of the initial assessment by the program manager.
    3) Placement of the new student in the classroom in which he or she is most likely to succeed. (Note that if the student is 10 years old, yet reading and doing math at the second grade, he will probably wind up in a second grade ("Level eight") classroom. Yet after 6 years, this system has not resulted in any student being retained for several years.

4) Conference between the program manager and the parent about the new student.
5) Observation of the new student by the classroom teacher.
6) Comparison of previous school records with current assessment and observations.
7) Final Placement (It takes approximately two weeks to complete the placement process.)

3) The exacting placement process also allows the teacher to focus on teaching grade-level material. Their job is to move every student forward at least one year during the year. They take pride in this task, and their achievement of it. Their supervisors make many observations of their classes, present model lessons, give feedback, and generally spend more time helping teachers teach well than working with the failing products of poor teaching. It is a remarkably optimistic notion of teaching and learning.

The principal has managed to gather a highly competent staff together, has them feeling good and doing fine teaching, and is succeeding with his students.

PUEBLO, COLORADO

Pueblo is one of the six largest cities in Colorado, with a population of over 100,000. The area is economically depressed, and has been for several years. One result is that Pueblo now has the second largest Chapter 1 program in the state. The district is almost exactly 50% minority, with most of the minority representation being Hispanic.

Forty Six percent of the students in Pueblo are on free or reduced lunch. Last year Chapter 1 served 1353 students in K-5 reading, at a mean cost of $785.00 per student.

Chapter 1 in Pueblo is known as "Project PRIDE", standing for PRescriptive Individualized Diagnostic Education.

The basis of the program is a focus on oral language development as interrelated with other language arts: listening, reading and writing. The program has a substantial focus on improving students' self concept.

The three goals of Project Pride are directly linked to the district's educational goals:

1) emphasis on improving reading and writing,
2) emphasis on student respect for self, and
3) emphasis on parent involvement.

Coordination with the regular school program has been achieved through a variety of vehicles. The district has attempted to implement Madeline Hunter's Mastery Learning-Clinical Supervision Model as well as the Teacher Expectation Student Achievement (TESA) program. Both have served to raise regular teachers' consciousness of the role of compensatory education. Each eligible school has a study team which examines most at need students. The team includes the Chapter 1 teacher, an aide, a regular teacher, and other relevant staff.

Pueblo has maintained a parent advisory panel. The Chapter 1 program has produced, and annually updates, a Chapter 1 parent's manual, which is brimming with practical suggestions for parents to use in furthering their child's education. Chapter 1 supports a Parent Community Worker and a "Parent Room" at the local continuing education center.

Staff development is a major focus of the project. After the director attended (and positively evaluated) Colorado's first extended program improvement workshop series, she asked that the series be repeated in her district. Quite simply, she stated that she would mandate the series for all her staff. "They'd be glad to come." The director of Project PRIDE doesn't just talk about staff development, she seeks it out and gets her people to attend.

Like the directors of many other exemplary Chapter 1 programs, Pueblo's is quick to talk about the leadership exercised by principals, the superintendent, and other district specialists. She is so facile at this sharing of praise, that an observer can be misled into overlooking her astute management of her program. In fact, she is everywhere in Pueblo Chapter 1. She revises the

curriculum guide and the parent handbook. She observes every Chapter 1 teacher in this large district on a regular basis. If she sees something that a teacher needs to improve, she points it out and is back in a few weeks. She seeks out new ideas and new staff development opportunities.

As a former elementary school principal, the director has a genuine respect for the role of the principal. She works hard with them. They respect her as a colleague.

Given the district's prior training in Madeline Hunter and TESA, instruction, and the monitoring of instruction, are integral to the district, and to Chapter 1. The program director constantly checks instructional appropriateness for individual teachers and students.

PRIDE staff constantly seek out new ways to identify and reward student progress and excellence. PRIDE students have won awards at spelling bee's, art exhibits, and similar activities. Students ask to be in PRIDE.

Positive climate is central to the TESA program. The director preaches it, the staff believes in it.

The entire staff has been through two programs that focus on increasing Academic Learning Time (ALT). When the director visits classes, she measures students' percentage of time in interactive and non-interactive instruction. She accepts nothing less than hard work from her teachers and students.

She studies the test and sub-test scores of every Chapter 1 student in the district. Which group/grade/school is/is not showing gains? What can be done about it? Her conclusions, together with parent and staff surveys, form the basis for the following year's instructional focus

Not only does PRIDE obtain mean NCE gains above state and national averages, students in PRIDE who score lowest on the pretest show, on average, the largest gains.

Asked why PRIDE is successful, the director reports that the TESA philosophy of raising student self esteem, together with a focus on oral reading and comprehension, makes the difference.

In addition, it was the site-visitor's impression that the director is an uncommonly pleasant, positive and persistent person. In her own remarkably gentle way, she holds her staff accountable for refining an articulated curriculum, continually diagnosing the problems of their students, and actively instructing. Teachers who fall short of those goals find themselves with a written prescription for instructional improvement. Teachers who make the grade get a great deal of informal praise. PRIDE uses available research tempered with a firm hand and gentle persuasion to move the faculty, and the students, forward.

NEW LONDON PUBLIC SCHOOLS
NEW LONDON, CONNECTICUT

New London Public Schools is in the trading, banking and distribution center for the southeastern region of Connecticut. The city's position at the mouth of the Thames River, near the eastern entrance to Long Island Sound, makes it an important seaport.

New London is described as urban. Population of the city is about 29,000. Total district enrollment was about 3,000, grades K-12, during the 1984-85 school year. Over the past few years, the number of students has been slowly declining. There is no major industry in the city. Most who work in industry must commute.

The school system population is about 48% White, not of Hispanic origin. About 30% are Black, not of Hispanic origin and 18% are Hispanic. There are also small percentages of Asian or Pacific Islanders and American Indians who live in the district. About 25% of the total student population come from low-income families, based upon the Connecticut State Department AFDC printout dated January 31, 1985. Student teacher ratio across the 13 grades was 16-1 during the 1984-85 school year.

The New London Public Schools Chapter 1 Supportive Mathematics Program provides services to slightly over 300 students in both public and non-public schools, though there are fewer than 20 students from the latter. The project serves four schools, three of which serve K-6. The fourth is a middle school. The three schools which have grades 4, 5, and 6 vary considerably in terms of the percent of students they have who come from low-income families. One school closely parallels the district picture, 23% while another has almost two thirds of its students coming from low income families.

Seventeen teachers and three aides serve students in the project. All teachers are state certified and all have at least a bachelor's degree. Ten of the seventeen teachers hold a master's degree and one has a doctorate. Average teaching experience among the 17 is almost 13 years.

The primary educational need of students was described broadly as mathematics. The need was determined by an annual needs assessment obtained from parents, teachers and administrators. In addition, the California Achievement Test (CAT) results are used. Students in the project are selected if their math scores are at or below the 23rd percentile. Teacher recommendations are also used to continue students in the project and to select new students as well. During the 1984-85 school year, estimated per pupil cost was about $1,000.

Staff reported that they felt staff development, strong leadership, clear goals/objectives and a unique instructional approach were the most crucial factors producing project success. As with other successful projects, while these characteristics seem to stand out, they do <u>not</u> stand alone. Each one in some manner influences one or more of the other 13 characteristics. For example, among the four cited above, there could not be good staff development or clearly stated goals and objectives is it were not for the fine leadership and cooperation seen during the course of the project. And so it is

with the other characteristics. There is a good balance even though some are seen as contributing more to the success of the project.

New London has two major continuous in-service professional development programs. The first, Effective Schools Project, emphasized what most of the effective schools literature has found to be typical of successful programs. Workshops are conducted for Chapter 1 teachers, regular classroom teachers and principals in the participating Chapter 1 schools. Emphasis is placed on having a clear school mission, high expectations for students, leadership, providing frequent opportunities for student learning, making certain that there is a safe and orderly environment at the schools and providing strong home and school support systems. In addition, several workshops for teachers (both Chapter 1 and regular program) are carried out dealing with Teacher Expectation and Student Achievement (TESA). Teachers are trained to interact with students in a nondiscriminatory manner providing support and motivating students, especially very low achieving students. Following these workshops, teachers observe one another in classroom settings to see how these new skills are used with target students, that is, those previously perceived as very low achievers. Other inservice opportunities at New London are provided which deal with instruction, motivation, test use and diagnosis of strengths and weaknesses in math.

Building principals, the project director and the Chapter 1 Department Head provide the leadership necessary to ensure success. These individuals are the primary force behind clearly stated project staff duties and responsibilities. There is also a clear division of principal/project director responsibilities but a close working relationship to ensure successful implementation and monitoring of the project. Communication among project staff, building principals, the project director, the Chapter 1 Department Head and regular classroom teachers is encouraged on a daily basis and is formalized and incorporated into monthly Administrative Council meetings and weekly Department Head meetings. Leadership is also seen in attempts to rally support from various constituent groups in the community by actively participating in organizations and social functions of groups whose membership is served by the Chapter 1 schools in the project.

One feature of goals and objectives common to all successful projects is that they are the same for Chapter 1 and for regular classroom students. Basically, the overall goal is to encourage low achieving and regular classroom students to achieve to their fullest potential. This is accomplished in part by providing the right program of instruction to all students. Parents, students, teachers, administrators and community members all participate in the establishment of goals and objectives for the school system. Individualized Educational Plans (IEPs) are established for each student by reviewing pre and posttest results, reviewing folders which are being maintained for each student and by a very close monitoring of student progress. Regular classroom teachers receive completed individual diagnostic test results and class summaries from project teachers. This type of feedback and cooperation helps regular classroom teachers with instruction for project participants. Thus, the focus, while on individual potential, is also on the particular group of students being taught. Good communication about goals, objectives and the IEPs is maintained throughout the year with parents, students, teachers, administrators and community members which furthers attainment of the desired outcomes.

Closely related to attainment of goals and objectives is their method of instruction. One unique aspect has already been mentioned, Individualized Educational Plans (IEPs) for students receiving supplemental instructional services. In addition to identifying information, this form contains diagnostic and prescriptive information. Following that information on the form is an identification of instructional goals, skill objectives, evaluation (that is, what to look for to see if the objectives have been accomplished), a list of instructional materials which can be used to help with the supplemental instruction and a time schedule for the proposed instruction. The IEPs have been found to be most effective in assisting everyone concerned with the instructional process. the project also attempts to maximize student learning time. Though most classes employ a pull-out mode, increased learning time is accomplished by utilizing more and more in-class instruction. Their approach also coordinated materials which are used to supplement the basal text. This helps align instructional objectives with the classroom or regular school instructional program. Development of study skills is also incorporated into this project and students are grouped for instruction according to need. This helps focus time on task by acknowledging students' strengths and weaknesses and provides for opportunities and activities which provide challenge and success by building of student strengths.

The four major characteristics described above also touch upon the other characteristics. For example, the Individualized Educational Plans (IEPs) and the Teacher Expectation and Student Achievement (TESA) workshops help promote parent/community involvement, coordination with the regular program, high expectations for student learning, feedback to students, parents and teachers and increased time on task. Solid goals and objectives for the project, which are in tune with the regular program goals, coupled with strong leadership and a good program of staff development are also closed related to some of the other areas which have not been singled out. As was stated early on in this case study, one cannot look at or describe any of the 13 characteristics in isolation. Where a project works well, as it appears to in New London, there is a positive, complementary interaction among all of the characteristics. Action in one area has a positive action or reaction in other areas.

RED CLAY CONSOLIDATED SCHOOL DISTRICT
DELAWARE

The Red Clay Consolidated School District is a K-12 school system located in Northern Delaware. The district emerged in June, 1981 as a result of the reorganization of a mandated desegregation plan. Comprised of 22 schools, Red Clay provides services to over 13,000 students from portions of the City of Wilmington and its surrounding suburbs. Population in these communities is approximately 130,000. Heavy industry; such as automobiles, banking, and chemical companies are the major employment avenues for the population.

As a result of desegregation, the student population is fairly heterogeneous. Racial/ethnic statistics for 1984 and 1985 indicate the student population is over 60% white (62.2%) and 30% black (29.6%), 7% hispanic (6.9%) and 1% representative of other racial/ethnic groups. Poverty ratios based on AFDC data appear to reflect economic conditions of the surrounding industries. Namely, in 1981-82, 6% of the population was identified as low income but in 1982-83, 11.4% was identified. Succeeding years follow the same up/down pattern: 83-84:7%, 84-85:14%, 85-86:7%. Thus, it may be concluded that the range of AFDC data across years reflect a baseline "poverty group of 6 or 7% with a "temporary" poverty group of 5 to 7% who meet eligibility requirements as the employment demand of industries change. Because of these fluctuations, the Chapter 1 program is the largest or at times next to the largest Chapter 1 program in Delaware.

In 1985, the Chapter 1 program was recognized by the U.S. Department of Education for its "success" with low achieving students. Comprised of different instructional delivery models that vary by school or grade level (in-class, pull-out, combinations thereof), Chapter 1 services are provided in reading, mathematics, bilingual, and early childhood in grades K-6. Nine public and seven private schools receive Chapter 1. Staffing consists of teachers and aides, many of whom have graduate degrees (teachers) and college degrees (aides). All reading teachers are certified as reading specialists and all teachers of mathematics have a minimum nine hours of course work in the subject. Although mode of service delivery varies, students receive Chapter 1 instruction at least 45 minutes a day for four days a week. Most students receive more than the minimum. The instructional ratio is 8 to 1.

The Red Clay Chapter 1 program was recognized for three attributes associated with effective schools: Monitoring Student Progress, Professional Development, and Strong Leadership. However, it is evident that many more of these attributes exist; that is, have been basic elements of the program. According to written and individual testimony, the success of the Chapter 1 program has been a result of a combination of "effectiveness attributes" rather than one or two specific elements. To understand how integrated these elements are one must start with the heart of the program, needs assessment.

Each Chapter 1 student selected by the program is given an extensive diagnosis to pinpoint strengths and weaknesses. An individual educational plan is developed in conjunction with the regular classroom teacher, parents, and the student him/herself. According to the director, this individualized plan is used to determine if instructional goals and objectives are being

attained. Since the individualized plan (IEP) contains not only skills that are to be mastered but also materials to be used, the regular teacher and Chapter 1 teacher are able to plan and coordinate skill instruction. Furthermore, parents are active partners in their children's learning in that they receive materials and techniques that can be used to reinforce skills at home. In a sense, through teachers and parents working together a coordinated effort is directed toward students' mastery of skills.

Student progress is monitored closely. IEPs are reviewed regularly by Chapter 1 staff; and on a two month basis a comprehension review of each IEP is undertaken by Chapter 1 and regular teachers as well as support personnel. In classrooms, student progress charts are used so that students can monitor their own skill progress. Additionally, skill progress reports are sent home with report cards and signed by parents.

Since student needs are the base of the program, IEPs are used not only to determine the specific needs of individual students but also to coordinate curriculum, plan inservice and professional development, as well as, to evaluate overall program progress. Through review of IEPs, staff (Chapter 1 and regular teachers) determine what types of instructional techniques should be used. Since progress is monitored regularly, changes in curriculum materials and instructional techniques can occur with ease. This practice permits staff to address the unique and changing needs of the student. Moreover, these profiles also serve as an assessment for teacher inservice, in that, they indicate areas for training in different techniques and/or in new materials. Either at a school, grade or across the district, IEP information is used to determine areas of professional development. Specialized instructional techniques (such as those that include use of the visual, auditory, kinesthetic, tactical), new instructional materials, and research findings are used for staff training in light of needs identified in the IEP. A unique aspect of the entire professional development component of this program is the required inservice by all Chapter 1 staff. Namely, each staff member is required to provide at minimum one inservice training session at the school level for staff or parents. Since the Chapter 1 staff as well as the program are viewed as an essential feature of the entire school and district basic skills program, inservice training provides another vehicle for close communication and sharing of curriculum and instructional ideas between regular and Chapter 1 staff. Moreover, Chapter 1 staff are involved in all of district and school level curriculum and planning committees.

While there are a host of Chapter 1 program components which exemplify the 13 attributes that seem to "spin off" or "spiral from" the needs assessment/IEP process of the Red Clay Chapter 1 program, high student expectations is one that demands mention. In this program staff philosophy is that all children can learn and attain expectations established for them. What is needed is "creativity". Chapter 1 staff are encouraged to learn to create, and all students can learn if one uses creative vehicles for students. In a sense, high expectations are established for all children and all staff are expected to create a context in which learning can occur.

One specific but small example of this creativity approach is a recent poster designed by students. As a result of the Chapter 1 recognition award, a group of students asked if there existed a poster that shows the worth of Chapter 1. When they were informed that none existed, the students' designed one.

Furthermore, the students contacted printers and arranged for production of their Chapter 1 poster. In other words, students learned not only how to create a dissemination vehicle but also learned how multiple copies are produced (students actually met with the printer and observed copies as they were being made.)

According to the state Chapter 1 director, the Red Clay Program has and continues to exhibit attributes associated with school effectiveness. Even after attaining the Recognition award, staff continue to improve services to children. In Red Clay, Chapter 1 children are viewed as other children and are not seen or perceived as being different. Rather, Chapter 1 children have "special needs". With creative teaching students can succeed and become productive responsible citizens.

DISTRICT OF COLUMBIA

The District of Columbia School system located in Washington, DC is a K-12 system serving approximately 90,000 students (1983-84 enrollment: 89,441). Poverty data for 83-84 indicated that 69 percent of the students were from low income families. For that same year, the total population residing in the district was 103,392. Since the district is the home of our nations's capital, the federal government, tourism, and service industries have been the major employment avenues for the population. While racial/ethnic statistics were not available at the time of this case write-up, general population trends indicate that most of the school district's student body is black with an increasing Hispanic and Asian subpopulation.

The Chapter 1 program in the district received a recognition award by the U.S. Secretary in 1984 for the Computer Assisted Instruction project that operated in grades 4-6. Specific effectiveness attributes upon which this award was conferred were: Monitored Progress, Feedback Reinforcement, and Coordination. However, in working with low achievers the Chapter 1 program extends beyond CAI and these three attributes. In fact, one may state that Chapter 1 is comprised of a variety of projects which include all thirteen attributes associated with effective schools. Since the needs of students and the leadership styles of staff are diverse, a variety of instructional projects and support services are essential and, therefore are provided by Chapter 1. According to the director, the program is based on "planned diversity" to assure every student has the opportunity to succeed. Therefore, "parent partners" are used in classrooms to provide one on one assistance to students. A tutorial project is used (Students Teachers Aides Reinforcing Skills) after school to assist students improve skills and to assist with completing homework. A CAI (Computer Assisted Instruction) project is provided within a tripod learning design. This project enables direct small group instruction by teachers, computer assisted learning with machines, and independent learning experiences through the use of conventional audio-visual machines and commercial materials. One of the more novel and newest projects FACTS: Family Assessing Computer Technology System has been designed to involve parent and children in learning. Namely, on a four week cycle, parents are loaned computers to use with their students at home so that additional instructional experiences in skill mastery can be provided. Other Chapter 1 services include pull-out projects and in-class aide projects. All Chapter 1 projects in the district provide instructional services in Reading, Mathematics, and Language Arts.

To capture the effectiveness of Chapter 1 with students, one must look beyond the type of project or the instructional delivery model to ascertain the district's unique approaches in meeting student needs. Chapter 1 in the District of Columbia is a compilation of various approaches addressing reading, language arts, and mathematics skill needs of students in grades K-9. However, across the grades, subjects, and schools are a set of practices directed at assuring all children's needs are met and assuring different learning styles are addressed.

Specific practices that emerge across Chapter 1 are:

- Use of a variety but correlated set of instructed materials;

- o Involvement of parents as active participants in the learning process of children;
- o Continuous monitoring of student's progress within Chapter 1 as well as across the local curriculum;
- o Extensive Staff development for all personnel in instructional approaches, materials, and techniques as well as dissemination of staff accomplishments; and,
- o Leadership of staff at the central office, school, and classroom level to assure high expectations for students are established and conveyed to students.

While these six practices include more than six attributes associated with effective schools, through discussions with staff it was evident that these practices are highly integrated characteristics of each project in the program. Moreover, they exist in all schools.

To illustrate how these practices are used to effectively increase the skills of low achievers, it is necessary that one understand the design of instructional services for Chapter 1 participants. Specifically, for each Chapter 1 student (regardless of the project or projects in which he/she is participating) Chapter 1 and local staff plan an instructional sequence that incorporates skills to be taught or reinforced, materials to be used, and evaluative strategies to determine progress. Specific forms are used to assure each child's instructional plan is clearly defined. Chapter 1 and regular teachers meet every nine weeks to review these plans. Moreover plans are signed by principals and copies are provided to instructional staff (teachers, aides. assistants, parent partners, etc.) to assure each staff is aware of a student's needs and the instructional sequence and methods to reach these needs. Since there exists a set of basic skills required for mastery by the district for each grade level, materials planned for instruction have been cross-referenced with the district's skill sequence. Through this instructional plan and through it's continued review and dissemination to all instructional personnel, student needs can be monitored continuously; modifications in instructional delivery or materials can readily be made; and services whether instructional or supportive can be targeted to individual students.

It is important to note that this calibrated team effort approach (Regular teacher, Chapter 1 teacher, assistant, aide, parent partner, and principal) is not limited just to the instruction of skills. Since many low achievers have not had successful experiences in school, the affective areas of the learner are embraced in the educational plan. Where appropriate, parent partners work individually with students to affect change in their self-image. High but reachable expectations are established so that success/achievement can occur. If support services are necessary, district or Chapter 1 funded personnel meet with instructional teams to plan services, monitor attendance, or to provide further diagnosis of needs. In this manner, both district and Chapter 1 resources can be targeted to the needs of the individual learner.

Since the District of Columbia is a large urban school setting comprised of four regional submits, instilling collaborative approaches to learning requires

extensive staff development and leadership by all. Regular meetings at both the school, regional, and district level are held both to solicit input as well as to disseminate information. According to Chapter 1 staff, because all personnel on a regular basis are provided opportunities to suggest new approaches, redesigns of existing approaches, materials, techniques, etc. there exists a sense of ownership. Chapter 1 is not a separate program known only to a few. Chapter 1 is an integral program of the district which evolves and changes from the suggestions of all who work with Chapter 1 students. It is the district staff who have made Chapter 1 a success and who assure its continued success and effectiveness in meeting the needs of students. Since growth requires opportunity and training, all Chapter 1 staff have opportunities to observe other Chapter 1 programs (out of DC), attend conferences, and participate in regularly scheduled inservice. For example, as a result of participation in a six state consortium (Project Magic) regular inservice was held on the effective school attributes. Special sessions in Academic learning time were also provided to a select group of schools. As a result, staff suggested the use of timers to decrease the amount of time spent in students moving through the tripod setting in the computer lab. Along the same lines, at the 1986 International Reading Association Conference, it was a parent not a teacher who disseminated DC practices to conferee. By having opportunities such as national conferences to both present and to participate, cross-fertilization of ideas nationally can occur and all staff can develop professionally. In other words, Chapter 1 can improve if all staff are provided opportunities to learn new ideas, share ideas, and network with other Chapter 1 programs. Colleagueity is important for all Chapter 1 staff because all are partners in the improvement and continued effectiveness of Chapter 1.

Evaluation:

The evaluation of Chapter 1 is not limited to only student progress on norm-referenced achievement data. Both unobtrusive measures along with test scores are used to plan each years program, to compare program effectiveness with research, and to motivate staff, parents, and students to continue improvement.

Results available for project schools in 83-84 (Data used for Recognition Award) indicate the following:

1. The percentages of promotions in project schools were 92.2% for grade 4, 93.1% for grade 5, 95.2% for grade 6, as compared to the rate of promotions in the Chapter 1 Reading and Mathematics Centers which were 92.1% for grade 4, 90.3% grade 5, and 94.3% for grade 6; and

2. The mean number of absences per child in the project schools reflected 10.48 for grade 4, 12.11 for grade 5, and 11.26 for grade 6, as compared with the mean number of absences per child in the non-project school which reflected 17.04 for grade 4, 17.89 grade 5, and 14.05 for grade 6.

BOISE, IDAHO CROSS AGE PEER TUTORING PROGRAM

Boise is the state capitol and largest city in Idaho (total population, approximately 100,000.) By state standards, the city is neither remarkably impoverished nor affluent. The district average free and reduced lunch count is 29.7%. At the four most at need Chapter 1 schools, by contrast, it is 61%; at one school, 75% of the students were on free or reduced lunch.

The Boise Cross Age Peer Tutoring Program is highly unified, and programmatically tight. With one new, Computer Assisted Instructional experiment as an exception in 1986, there is little variation in program format or implementation strategy across schools.

The program has been in existence for 14 years. The administrators of the program have demonstrated a constant dedication to improving the curriculum and instructional delivery of the program. It is J.D.R.P. and N.D.N. approved and funded. This is a mature program.

The exemplary characteristics of Boise's project are:

1) An instructionally sound concept. Peer tutoring is as old as recorded education. Aristotle often taught his brightest student, who taught #2 and so on. In practice, the upper grade students (tutors) enjoy being in charge of someone else's education (or, at least, a small part of it.) They take their responsibility very seriously. Having learned the information only a few years previously, they tend to remember how they figured out that 8 x 4 = 32, and often produce ingenious explanations for their younger charges. The tutors take no excuses from the young tutees. The tutors learned it, and simply never doubt that the younger students can learn too. They hold their charges accountable.

2) A very thoroughly worked out, highly structured curriculum. The Boise Chapter 1 administrators have worked with faculty members at a nearby university for 14 years in refining the peer-tutoring curriculum. The Chapter 1 curriculum is completely standardized, and in many respects independent of the regular curricula of the schools. There is an emphasis on keeping regular teachers informed of current student tasks and progress, but the Chapter 1 curriculum is the one taught during Chapter 1 time. In some schools the principals and teachers have been sufficiently impressed with the Chapter 1 curriculum and delivery system that they have mandated it for entire grades.

3) An efficient instructional management system. Curriculum, management, and accountability are inextricably linked in the Boise system. Each student's progress is monitored and recorded daily.

4) A "can do" attitude that pervades administration, instructional managers ("aides" in any other program), tutors and students.

5) An openness to new ideas and delivery methods. This year one school had the opportunity to obtain CCC computers and software for their Chapter 1 students. The managers took a training course, and the

students have used computers in stead of peer tutors this year. If, at the end of two years, the computers are doing as well as the tutors at no extra cost, that school will continue their use, and other schools will be free to buy in. If not, the school will revert to peer tutoring. (After six months, the managers were reporting signs of "computer burnout" among the students. They never saw tutor burnout with cross age peer tutoring. It was the opinion of the field site visitor that cross age tutoring would return to that school.)

6) High quality evaluation and feedback. The Boise program has done thorough annual evaluations, and faithfully reported their results, for at least eight consecutive years.

7) By Chapter 1 standards, a very low cost per student served (under $350/yr.)

8) Staying power. The program has, for 14 years, lasted through various Superintendents and numerous site level management changes. It is an institution in Boise.

9) A close examination of the student level data at the four lowest SES schools in the district (45-75% free lunch) revealed a clear, negative relationship between pretest scores and gains. The students with the lowest pretest scores, on average attained the greatest gains. Students with an average pre NCE below 10, had a mean NCE gain of 31.6. Students with pre scores between 10 and 19 showed average gains in the 20's. This data matched the informal impressions of administrative and classroom staff.

10) As one principal stated to the site visitor: "The evaluations say that the students gain in achievement. That is good. But what I value most about cross-aged peer tutoring is the citizenship gains shown by the upper grade tutors. They become very protective of their young tutees. Parents report that these older students become more responsible in dealing with their younger siblings at home." Achievement is only one of the desired, and achieved outcomes of the program.

11) The administrative and teaching staff are believers. They have confidence in their program, and remain excited about it after 14 years.

12) The program is packaged, NDN and JDRP, and ready to be picked up at other locations. The staff made an introductory video-tape for programs in other parts of the country to view if they are considering cross age peer tutoring. As a theme song, they chose a variation on the Pointer Sisters' "I get excited."

The Boise Cross-Age Structured Tutoring Program has a coherent philosophy, an articulated curriculum, staff enthusiasm, and site level administrative support. It has simultaneously generated large, sustained NCE gains among the most needy, and good citizenship among older students.

UNIFIED SCHOOL DISTRICT #500
KANSAS CITY, KANSAS
Reading and Math Learning Centers
(Grades 4-6)

Kansas City, Kansas is an urban city of 170,000. It is the second largest city in Kansas and is part of the metropolitan Kansas City area. It is a city of commerce and industry. One of the largest areas of employment is in the medical service sector where the University of Kansas Medical Center employs some 4,000 people. Kansas City, Kansas is the third largest rail center in the nation. The city also has eight grain elevators and is a major flour milling center. The city's major industries are auto manufacturing, soap and detergent manufacturing, oil refining, and steel milling.

The school district enrollment is 23,000 students; the district employs approximately 3,000 employees including nearly 1,650 teachers. The public schools include 35 elementary, eight middle schools, four senior highs, an Area Vocational Technical School, an Academy of Arts and Science, a school for teen-age mothers, a special vocational training center, and a high school drop-out prevention program. The district also has instructional facilities at Kansas University Medical Center, the Kansas School for the Visually Impaired, and detention homes.

Based on free and reduced lunch counts, the district has an average of 42% children from low-income families. The racial/ethnic composition of the district student body is 44% white, 47% black, 6% Hispanic, and 2% Asian. Since this study focuses on Chapter 1 programs in grades four-six, one elementary school (K-5) and one middle school serving grades 6, 7, and 8 were reviewed. For the elementary school, the percent of children from low income families is 70%; the racial/ethnic composition is 98% black. The middle school has an average of 40% students from low-income families and a racial/ethnic population of 53% black and 45% white.

The Chapter 1 reading and math instruction takes place in a learning center environment. The learning centers consist of independent student carrels, each equipped with a tape player, a headset, a marking pen, response sheets, and student booklets. Computers are replacing tape players in some of the learning centers. The New Century Reading and Math programs utilized in the center are designed to provide individualized, self-paced instruction with active learner response and immediate feedback to the learner. Students are trained to gather the materials needed to complete their assignments. When a student needs help, a signal is given the teacher or aide to come to the carrel to help the student. Twenty-eight students attend the center for forty to forty-five minute class periods.

On-site interviews with Chapter 1 teachers, coordinators, and principals revealed that the individualized format of the instruction and the diagnostic test/placement feature which places students on an appropriate level for immediate success significantly contribute to student progress. The learning center format enables the Chapter 1 program to accommodate a large number of students in a cost effective manner. The step-by-step instructions, active responses, immediate feedback, and self-pacing design enables the teacher to tutor students who need special help.

To monitor student progress, a recording system called a Weekly Center Report is utilized. Entries which describe each student's mastery of skills introduced are made hourly into a permanent record. Pilot computer record keeping systems are being used in some learning centers. Teachers check the report daily to determine the degree of success of each student. In addition, the teacher and aide listen to the taped lessons with students, tutor individuals, and discuss the lessons with the students. If material, method, or approach appear to be ineffective, adjustments are made. In addition to the immediate feedback students receive, teachers and aides check completed response sheets for mastery. Student points earned for 90% mastery of the lesson may be accumulated and exchanged for rewards such as free time, certificates, and pictures. Upon completion of designated skill levels within the program, a formal letter is sent home to the parents.

Chapter 1 teachers attend a four-day training institute to learn the math and/or reading curriculum and the procedures for operating an effective learning center. The center aides also participate in a similar training session which is conducted over a two-day period. Most school principals have also attended a four day training institute to ensure their familiarity with the instructional objectives of the program as well as the learning center management techniques. Interviews with the principals revealed that this training makes them feel comfortable with the Chapter 1 program and assists them in their supervision of the centers. The learning center coordinator and Chapter 1 supervisor work closely with building principals to insure effective operation of the centers.

Learning center teachers and classroom teachers confer about the skills that are being remediated, learning modes of students, and other pertinent information regarding individual students that may enhance the students' success and progress. Regular classroom teachers are encouraged to visit the learning center during planning periods to become familiar with learning center teaching methods. The learning center curriculum has been thoroughly analyzed to determine how well it correlates with the regular classroom curriculum in reading and math and how well it correlates with the district testing programs.

Chapter 1 teachers, coordinators, and administrators also feel that the success of the Chapter 1 project can be attributed to the enthusiastic support the parents display for the program. Each attendance center initiates a program of orienting their Chapter 1 parents to the objectives, procedures, and method of instruction used in the reading and math centers. Many centers provide parents the experience of changing places with their child for classes which gives the parents a hands-on direct experience with daily lessons. Parents and other community members are directly involved with the planning, implementation and evaluation of the program through district wide meetings. The budget, testing procedures, evaluation, scope of services available at each center, and the staff required to provide these services are topics discussed during planning sessions. The local newspapers are very cooperative in publishing feature stories and photographs of Chpater 1 programs. This positive support informs a segment of the local community, which is not normally an active part of the school population. Through take home practice worksheets, parents gain concrete knowledge of their children's progress.

Individual student results are discussed with parents at each building during parent teacher conferences and open house or by special arrangement any time during the school year.

The effectiveness of the Chapter 1 project is evaluated in terms of individual student results, individual classroom results, individual school results, and by district level results. Changes in the Chapter 1 program have been made on the analysis of evaluation results. For example, the Chapter 1 reading and math programs in the middle and senior high schools were once full year programs. After several new reading/math centers were established during the second semester of a given school year, it became evident from the evalauation results that middle and secondary students made as much progress from the semester programs as those scheduled for the full year. Therefore, all middle and secondary programs are now semester programs enabling the district to serve twice as many students. Each year approximately 40% of the reading participants and 60% of the math participants post test scores are at an achievement level that results in exiting the program.

TOPEKA PUBLIC SCHOOLS
TOPEKA, KANSAS
Reading (Grades 4-6)

Topeka, Kansas is an urban community of approximately 125,000 with a diverse economic base. As the location for the state capital, it is a center for state workers and legislators. Topeka is also the site of a university and several health facilities including psychiatric and mental health centers . The school district with an enrollment of 14,660 is the third largest employee. In addition, there is some industry and agriculture. The school district average of low income families (based on number of free and reduced lunches) was 38% in 1984-85 compared to 63% low income average in Chapter 1 schools. For the three Chapter 1 reading projects that were the focus of this study, the percent of children from low-income families was 97%, 91%, and 74%. Topeka's Chapter 1 program serves children who typically have lower pretest scores than is characteristic of the state Chapter 1 population. There is also a high rate of mobility among Chapter 1 students. Chapter 1 schools often have a 60% mobility rate during the school year. The Chapter 1 instructional style of diagnostic/prescriptive instruction has had a positive impact on the district's philosophy. Regular classroom teachers in the district report that students in Chapter 1 do better in the classroom because of their Chapter 1 participation. The Chapter 1 reading program in grades 4-6 is a pull-out program with average group size of 10-12 students with a teacher and an aide.

Effective instructional leadership by the Chapter 1 coordinator and resource teacher has been one of the significant factors in the success of this project. The coordinator and resource teacher make regular visits to Chapter 1 buildings to monitor instructional techniques being employed and to demonstrate new research-based instructional strategies. These demonstrations often occur over several days with students of different grade levels. The coordinator and resource teacher talk with teachers informally regarding specific children who may require a special technique or materials. They also solicit input from teachers who have developed strategies that are particularly successful and which can be shared with other teachers. The coordinator and resource teacher conduct both formal and informal visits with all Chapter 1 principals throughout the year. Principals also take an active role in helping Chapter 1 and classroom teachers coordinate their instructional methods. They assist Chapter 1 teachers with scheduling, placement of students, and provide a positive climate in which Chapter 1 is considered an important supplement to the regular school program. The Assistant Superintendent of Educational Services is also involved in all decisions regarding Chapter 1. His active role in Chapter 1 matters provides a solid foundation for Chapter 1 activities within the district. Both the Superintendent of Schools and the Assistant Superintendent addressed Chapter 1 parents at a Parent Advisory Council meeting.

Closely monitored student progress enhances the communication and coordination between the Chapter 1 teachers and regular classroom teachers. Through Personalized Education Programs(PEP), classroom teachers communicate students' needs to Chapter 1 teachers. These forms provide the Chapter 1 teacher with specific objectives for the Chapter 1 students. The one-page form of the PEP, its simplicity and the ease with which it can be completed have contributed to the form's success. Due to the high rate of

mobility of Chapter 1 students in the district, the PEP information facilitates sharing of information with the new Chapter 1 teacher. Both formal and informal evaluations in the form of tests and teacher judgment are utilized to determine the effectiveness of methods and materials as students progress through the project. To assure student progress, transfer forms are used to maintain continued service and attendance records to monitor participation. In on-site interviews with teachers and principals, the coordination and positive relationship of the Chapter 1 teachers with classroom teachers was repeatedly cited as the most important attribute of success. Chapter 1 is accepted as part of the total school curriculum and Chapter 1 teachers are regarded as part of the instructional team.

Student progress and achievement are recognized in many ways such as through informal rewards, formal progress reports each nine weeks, and award certificates. Students' work is also published in the THE CHAPTER 1 CHATTER newsletter. Chapter 1 schools have also been featured on local TV news that broadcast a story on a reward system based on the movie, GHOSTBUSTERS.

The on-site interviews of teachers and administrators also revealed that the focus on individual needs in the Chapter 1 small group setting and the matching of children's unique needs to materials were attributes that contributed to the project's success. Teachers are constantly challenged to be sensitive to an individual student's strengths and weaknesses. If a student does not respond favorably to one approach, a wide variety of resources are available from which to choose another set of materials. The Carbo Reading Styles Inventory is used to assist in diagnosing when a student has not responded to traditional remedial techniques. Methods and materials are judged "good" if they foster on-task behavior and result in improved performance.

The overall goals of the Chapter 1 project are based on the district's commitment to the improvement of student competency in reading and on the educational philosophy that a positive self-image is related to increased academic performance. These goals are communicated to parents through letters, conferences, and Parent Advisory Council meetings. Regular classroom teachers keep informed through conferences with Chapter 1 teachers regarding students' needs and activities in Chapter 1 that support classroom expectations. Specific goals for each student are identified by objectives not mastered on the California Achievement Test, the Iowa Test of Basic Skills, The Kansas Minimal Competency Test, classroom teacher observations, Chapter 1 teacher observations, and student self-monitoring.

Chapter 1 classes are very orderly and well-disciplined because the atmosphere is stimulating and provides success. The district adopted assertive discipline plan complements the project's goal to improve a student's attitude toward self and others. The positive work oriented attitude is achieved by providing for success through self-disciplined and purposeful activities.

Parents are regularly involved in their children's Chapter 1 instruction in a variety of ways. Teachers send home completed class work, books and stories to be read with parents, and word lists to be studied/discussed. Teachers also send personal progress information home on a continuing basis, make periodic phone calls, and meet with parents during parent-teacher conferences. Four

Chapter 1 Parent Advisory meetings are held each year; past topics and activities include panel/audience discussion of early childhood development, make-it/take-it activity workshops, hands-on computer workshops, family read aloud promotion, summer school informational movie, and thematic unit demonstrations.

The Chapter 1 staff development has several components. Regularly scheduled inservices are held for all Chapter 1 personnel for the following purposes:

(a) preparation and evaluation of pretest and posttest results
(b) dissemination of information regarding Chapter 1 regulations, and
(c presentation of instructional methods and techniques.

These meetings are held after school and 95-100% of the teachers and educational assistants attend. Other inservice has been conducted for Chapter 1 teachers who were receiving computers for their Chapter 1 classrooms. Chapter 1 teachers and administrators also attend district-developed inservices and state and regional conferences.

During these inservice meetings, Chapter 1 office staff and teachers study the results of the pretest to determine both individual and group instructional strengths and weaknesses. Staff regularly evaluates the design of forms, reference manual, computer management system, and inservice training to provide meaningful feedback to the schools. Evaluations have asssisted in the improvement of the design of the Chapter 1 project in the following ways:

(1) As a direct response to student needs as indicated on evaluation results, reading comprehension was emphasized;

(2) The computer management system was expanded to better meet the diagnostic/prescriptive needs of students.

(3) Forms and reference manuals were revised in response to project changes and teacher recommendations.

(4) Each teacher was supplied with the CAT-C Class Management

Guide that outlines strategies to be used in teaching the skills which are tested on the CAT-C.

(5) The district's minimal competency program was supplemented by encouraging Chapter 1 teachers to address the objectives on the state minimal competency test.

Evaluation results have shown that when considering grades 4-6, this project's gains exceed the state average despite the fact that students served are more needy as demonstrated by the students' lower pretest scores than is

characteristic of the state Chapter 1 population. Sustained gains also indicate that individual students maintain and extend their growth over more than one year of participation at all grades.

JEFFERSON COUNTY PUBLIC SCHOOLS
LOUISVILLE, KENTUCKY

This district serves an urban-suburban community of 682,700 people, with a school enrollment of approximately 92,000 students. The poverty indicator for the community is 15.4% (ED). Chapter 1 services are provided in 55 of the district's 76 elementary buildings. The two Chapter 1 programs examined in this district, Reading Plus and Math Plus, are in 26 elementary schools which have Free and Reduced Lunch percentages ranging from 36.21% - 95.41% (median of 63.75%). The Reading Plus and Match Plus programs provide service to approximately 2,400 reading students and 1,080 math students, grades 1-5, annually.

Both programs use a diagnostic-prescriptive design as the basis for instruction. The Reading Plus program requires that teachers be certified reading specialists and Math Plus teachers must have a Master's degree with 12 hours in math coursework and at least three years elementary teaching experience. Many staff members, both professional and paraprofessional, have ten or more years seniority with the district's Chapter 1 program. All Reading Plus and Math Plus classrooms have at least one instructional aide working with the Chapter 1 teacher.

After reviewing the program's recognition proposals, interviewing the project's director, coordinators, teachers, aides and a principal, and making classroom observations, the attributes observed as most strongly represented in both programs are as follows:

The Chapter 1 school that was visited was an older but clean, well-maintained building with plants and student artwork providing cheerful decoration in the halls. The overall physical appearance of the building suggested an orderly and safe environment for learning.

The Reading Plus and Math Plus programs are housed in a single classroom that was partitioned to provide two small but separate areas. While this arrangement resulted in crowded work areas and an elevated noise level, it was noted that both staff and students seemed to work productively.

An impressive level of enthusiasm and energy was apparent in the Chapter 1 teachers and aides as they talked about the programs and as they worked with students. This enthusiasm was further reflected in the attitudes of the program director, coordinators and the principal as they each were interviewed.

Using positive reinforcement, caring about the "whole" person and providing a well structured yet flexible learning environment seem to be widely held and well practiced beliefs for these programs. The Math project's recognition proposal summarized this philosophy succinctly, stating "while a highly structured and disciplined Math Lab is essential for learning, the design of the program recognizes the fact that such structure does not preclude an atmosphere of encouragement, initiative, creativity, fun with math and the experience of success".

An excellent variety of resources and materials was thought to contribute to the success of the program. New materials (both commercial and district developed) are reviewed and added to the program as appropriate. The available materials reflected attention to good practices and current research. For example, the reading instruction in most Chapter 1 classrooms reflected current research through use of a wholistic, rather than a skills, approach to reading. Use of direct instruction methods, integration of writing activities and use of story mapping and questioning strategies were also noted. The math program consistently employs a mastery learning approach, beginning with concrete skill experiences and developing toward the abstract level of the skill. Extensive use of manipulatives was noted in the math program; reasoning and application skills are taught both in an integrated and isolated format. In both reading and math, flexible grouping strateiges as well as individualized instruction are used. Teachers also use a multi-modal instructional approach.

Leadership is most notably demonstrated as a strong supportive function. The program director and coordinators expressed their confidence in the program's effectiveness and the staff's capacity to carry out the program's goals. While the program leaders did not appear to play a direct role in instructional decision making, their support is evidenced in various ways, such as development of a correlation guide to align with the district's basal series and facilitation of on-going program refinement. Close contact with each Chapter 1 classroom is maintained through regular visits, at least bi-weekly, from program specialists of the central administration staff. The program's high standards were reflected by the program's central office and building-level leaders alike.

Chapter 1 teachers and regular classroom teachers meet formally at least four times each year to discuss each student's instructional programs and review interim data. Much information is also shared through informal meetings. A Parent and Teacher Conference Calendar/Log is maintained by each Chapter 1 teacher. Pupil Profile Sheets of each student's skill levels are kept by the math teachers and used as a basis for instruction and coordination discussions. A skills/materials correlation guide is used in the reading program. A new "in-class" version of the reading program, which will require strong coordination, will be piloted in several buildings during the upcoming year.

Additional notable attributes were usually interwoven within other program qualities. For example, student and teacher excellence is recognized and rewarded in a number of ways, e.g. special recognition ceremonies, "thank you" flowers, and certificates. These efforts contribute to the positive climate of the Chapter 1 classroom, reflect the strong program leadership and, in some cases, are part of the school's parent advisory council's activities. Another example is staff development and training which is planned by the program's leaders, reflects an expectation for all staff and facilitates the implementation of appropriate instruction. High expectations permeate several attributes in a similar manner.

In addition to pre and post test evaluations, information supporting the academic success of the program is the percent of students mastering 80% or more of the skills instructed in the math mastery learning and the reading diagnostic-prescriptive program. In math 99.8-100% of the students met this criteria, averaging completion of four skill levels. The reading criteria were

met by approximately 85% of the students achieving a mastery of 92% of the skills instructed, averaging completion of 19 skills.

CARROLL COUNTY, MISSISSIPPI

Carroll County, Mississippi is a low income rural county. There are two very small towns in Carroll County and only one factory, a picture framing operation. There is some farming. Most of the people who are employed work outside the county in factories in Greenwood or Winona. The vast majority of Carroll County residents do not have a high school degree. There are a lot of single families and a lot of welfare recipients - 35.1% of the children in Carroll County live in families whose income is below the federal poverty line. Ninety-eight percent of Carroll County's students qualify for free lunch. There is some value for education in the community, but little support. While parents value a high school education for their children, the realities of the family needing an additional income often interferes with a student's completion of high school. There are strong expectations on the part of many parents that their children will drop out.

Because of the lack of support from parents and the community, students do not come to school motivated to learn or valuing an education.

One thousand seventy-one students attend Carroll County's four schools, 86.5% of these students are black, 13.5% are white. Many students going into the system now are little better prepared for school than their parents were. The school system attributes this difference to earlier Title I programs. They are able to distinguish second generation Chapter 1 students, because they are better prepared for beginning school than are the students whose parents did not receive Title I services.

In 1985 the Chapter 1 program served 495 students in grades 109 at an average per pupil cost of $379 for math and $323 for reading. Chapter 1 students are very similar to the other students in Carroll County schools. The goals of the Chapter 1 program are to give students basic skills in reading and mathematics to help them move up to average educational performance so they can participate fully in society. The goal for each individual student is to increase his/her achievement by 10% over the gains the year before. There is a strong belief that all children can learn. This belief is reinforced by principals in every faculty meeting. All students are expected to score above a minimum score on criteria referenced tests and the teachers are expected to do whatever it takes to get each student to meet this minimum requirement.

One of the elementary schools, Hathorne, has recently undergone a change in principals. A Chapter 1 teacher was promoted to principal and is using the opportunity to introduce some of Carroll County's Chapter 1 practices schoolwide. The principal has proven to be a strong instructional leader and has been able to rally support for quality education from teachers, parents and the community. In fact, parents painted the school with paint supplied by the system and raised money to match district funds to purchase a drinking fountain for the school. The principal has also captured an opportunity to motivate students. Students report to the auditorium when they arrive. The principal gives a pep rally each morning and sends the students to class with a positive message about learning.

Each of the elementary schools provides a warm climate for the students and colorful, climate-controlled surroundings. The elementary students are

excited about Chapter 1. Now that high school program is run as a replacement project, the students are easier to motivate because there is not stigma attached to being in Chapter 1 and because they do not see themselves as having the burden of an additional language arts class.

Every year, Carroll County does a needs assessment to make sure they structure the program in such a way as to meet the needs of the students. Chapter 1 classes are held in labs during a time that is a study period for other students, so that Chapter 1 students do not miss content being taught in their regular class. Students are pulled from several classes so that Chapter 1 classes contain students of similar ability groups. The Chapter 1 class supports the instruction from the regular class by reinforcing skills being introduced by the classroom teacher. The Chapter 1 program uses materials that supplement those being used in the regular classroom and Chapter 1 teachers use different approaches. The Chapter 1 teachers try to keep their students up with the students in the regular classroom so they will remain on grade level. Teachers plan well and prepare materials in advance so that the class period is devoted solely to teaching. Principals ensure this process by signing lesson plans each week.

Chapter 1 teachers use teacher made tests to assess student progress. They give feedback to students about their progress and reteach any skills that were not mastered. Notes about student performance are sent home on colorful paper. Rewards abound including star charts and smiling faces.

"The reason our teachers are so successful with our students is because they are like the students they teach. They understand their students. The teachers went to rural school themselves; they are not afraid to put their hands on dirty kids." (Chapter 1 Coordinator)

Chapter 1 teachers coordinate closely with regular classroom teachers through written communications, scheduled planning times and informal encounters. The last period of each day is set aside as the Chapter 1 teachers' planning period. This gives Chapter 1 teachers an opportunity to meet with each other and with regular classroom teachers. In addition, one day a month is set aside for a common planning time.

Chapter 1 parents are invited every year to a special open house where the Chapter 1 students perform. Last year they presented Books Alive in which each child read and dressed up like one of the characters from a book he had read and told about his character. The school was packed.

The Chapter 1 program receives strong support from the superintendent, who was previously the Chapter 1 coordinator. While Carroll County has had a strong Chapter 1 program for many years, the superintendent is always trying to fine tune it. He relies on the annual evaluation results to give him feedback about the success of his fine tuning efforts and keeps those innovations which meet in the success. As superintendent he is now incorporating some of the successful Chapter 1 practices into the system as a whole.

Carroll County has district wide testing in grades 1-11 and Chapter 1 students have had a positive influence on the district scores. Their performance is

coming up to grade level to the extent that there is a reduction in the number of students eligible for Chapter 1, especially at the upper elementary level.

MERAMEC VALLEY
R-III SCHOOL DISTRICT
PACIFIC, MISSOURI

The Meramec Valley R-III School District was cited for ite exemplary Chapter 1 program in 1985 by the U.S. Department of Education. The Chapter 1 program is available in grades one through six, but only the Pacific Middle School, containing grades four through six, was site visited. Pacific is a small town (population of the district is approximately 21,000) located in the Meramec Valley approximately 60 miles southwest of St. Louis. The school district covers 100 square miles and contains a diverse set of lifestyles. The eastern end (the end closest to St. Louis) is more typically a bedroom community district, while the town itself and the central part of the district have large pockets of low income families in low rent housing. The western end of the district is primarily agricultural with large dairy farms and pockets of middle to upper class residential developments. Many of the low income families who resided in trailer courts in Times Beach, Missouri, migrated to Pacific after the dioxin contamination of their community and homes.

When the Chapter 1 Project Identification Program application was submitted in 1985, the percentage of low income families in the district was listed as 13 percent. This figure is slightly misleading as it wasdetermined from those who applied and were eligible for free lunch at all the schools in the district. It is the contention of district administrators that high school students in their district do not apply for free lunches and that lowers the overall district percentage of low income families. When only the Pacific Middle School was considered during the site visit, 65 out of 300 students were eligible for free lunch, a rate of 22 percent. In addition to the higher poverty measure, the mobility rate at the Middle School also averages between 25 and 30 percent each year. The district is homogeneous racially with a Black population of less than 2 percent. The existence of low rent, and in some instances, substandard housing provides families living on the margin a haven for 60 to 90 days before nonpayment catches up with them. These factors have also helped shape the nature of Chapter 1 remedial reading as it is today.

The first Title 1 program in the Meramec Valley School District was in kindergarten. It tried to offer the same kind of "head start" that was available to young children through the formal Head Start program. An after school component was the next addition; and, at that time, science objectives were included to remediate educational disadvantagement. But as the focus of Title 1 shifted to basic skills, the Meramec program became a reading program in grades one through six. Two years ago a mathematics component was added, but reading continues to constitute the major emphasis. Community support and demand for the program has been a positive feature throughout its history. Recent reductions have threatened the summer school program of basic skills, and the community has expressed its concern over the reduction in service. A new elementary school will open in the Fall of 1986 and because of redrawn school boundaries, it probably will exhibit the greatest concentration of need. So while overall, children in grades K-3 will experience smaller class sizes, the scheduling and travel time of teachers may result in fewer Chapter 1 services in some schools.

The Chapter 1 remedial reading program at Pacific Middle School emphasizes diagnosis, prescription, and treatment. Because of the high student mobility

rate, both regular classroom and Chapter 1 teachers need a program that can quickly and accurately integrate new students into an effective instructional plan. Specific learning objectives for the Chapter 1 reading program are based on district objectives. Teams that included both Chapter 1 and regular classroom teachers developed the objectives for each grade level. In addition, supplemental Chapter 1 objectives include mastery of sight words from selected lists and meaning vocabulary from the 1500 words on the Missouri Basic Word List.

Several years ago, language master machines were acquired to provide low cost learning stations for sight word and meaning vocabulary development. The daily practice provided with the machines proved to be effective. During the 1983-84 school year, a Chapter 1 teacher designed a computer program to produce practice cards, study sheets, and tests. A microcomputer was used to implement the program in a pilot site with the result that the number of words taught and mastered nearly doubled in the pilot site. This provided the impetus to reexamine the Chapter 1 reading program and to explore computer applications for increased effectiveness.

The Chapter 1 staff tracked the progress of every student toward mastery of identified objectives through a reading objective card that was maintained in the permanent record. As objectives were introduced and mastered, cards were updated periodically. While the staff was satisfied that the tracking system provided standardized goals and progress from grade to grade, they realized that because it was a "paper and pencil" system, information was not as timely or as accessible as it should be. As a result, the reading objective cards were computerized during the 1984-85 school year, and the district has used this experience as a pilot test for computerizing student objective cards throughout the entire district.

Quarterly reports to students were a regular feature of the Chapter 1 reading program, and they included suggestions to parents on specific goals for their children and ways to achieve the goals. Computerization of these reports has allowed teachers more time to individualize the advice offered to parents. Student contracts are used as management tools for feedback on student performance and to monitor progress daily on specific goals. These contracts are also generated by computer now. Lastly, through the use of computer spreadsheets, teachers are able to closely monitor evaluation results and use them for program improvement on a timely basis.

Overall district achievement gains have been above the state average in every year since 1980-81. In addition, the percentage of the district's population that is eligible for Chapter 1 remedial reading services has fallen significantly over an eight year period. Since the composition of the community has not changed significantly during that period and since the districtwide scores on the California Achievement Test have risen, the ongoing impact of the Chapter 1 program is very likely contributing to the drop. A Sustained Effects Study done over a two year period on a small sample (N=12) of students released after one year in the program show that they were able to sustain their Chapter 1 gains one year after release from the program.

INSTRUCTIONAL ATTRIBUTES

Meramec Valley identified the cluster of instructional attributes as the strength and major focus of their Chapter 1 reading program. The Chapter 1 program is a classic pull-out project serving 225 students at 5 teaching sites. The Pacific Middle School is one of the teaching sites and is assigned a full-time reading teacher. The Middle School, grades 4 through 6, uses the basic program model of diagnostic-prescriptive teaching. Such teaching requires materials developed for the mastery of specific skills. At the Middle School, reading comprehension is stressed, and the emphasis is on using literal, inferential, sequential, main idea, and higher order thinking skills. Reading passages must not only increase in difficulty, but also in length to provide practice in reading and content area skills. A variety of materials are used including two computer based programs.

The Random House Tutorial Comprehension Series is compatible with an Apple IIe microcomputer. It includes tutorial and practice lessons. It teaches main idea, details, sequence, inference, and critical reading skills. The Series provides an excellent supplement to other hard copy and consumable materials available for prescription, and it also provides an additional format for students to practice what they have learned in the tutorial or teacher directed lessons. The Series also includes its own pre and post tests and an instructional management system with a record keeper.

The second program is WORDMASTER, a teacher designed program that accepts teacher-entered words and definitions. Once entered, the words can then be used to generate language master cards, study sheets, and alternative forms of tests on the same vocabulary. Tests and study sheets can have from 3 to 26 items. A two-digit code accesses the particular test/label/study sheet which is generated in less than a minute. A practice unit of 10 language master cards can be completed in 3-5 minutes. Because of the efficiency of materials production and recordkeeping, teachers feel they are able to pace instruction more effectively to both stimulate and motivate student learning. In addition, computers aid diagnosis and evaluation through the generation of alternative forms of tests that can assess mastery learning.

A typical group has four to six students and meets for 30 minutes a day, five days a week. The Middle School begins its day at 7:30 AM and completes it at 2:30 PM. The reading teacher will meet with seven such groups over the course of the day. Direct teacher instruction begins the week and precedes practice work in a particular series and at a functional reading level. The practice materials also serve a diagnostic purpose indicating where reteaching or more practice is needed on a specific skill. If a student masters a particular skill at a given level, they move to the next level. Student contracts direct students and their parents on work for one week at a time and help the teacher track student progress on a daily basis.

The Chapter 1 and regular classroom teachers work together to develop a sense of importance for reading within each student. In the regular classroom, the students are encouraged to read as much as possible. Reading Circle awards are given to those who have read a specified number of books throughout the year. These awards are part of a statewide program. For the past four years, over 90 percent of the Chapter 1 Middle School students have earned this award and a free hamburger offered by a fastfood chain. Chapter

1 students through high interest-low readability materials in the Chapter 1 classroom have a fair and equal chance of participating in various special awards programs in their regular classrooms.

Chapter 1 teachers use many methods to communicate positive expectations about achievement to their reading students. When expected behavior and achievement are shown, special notes are sent home to parents, and positive expectations and achievement are communicated on a regular basis to th regular classroom teacher. Special privileges are used as a motivational device and to commend successful performance and recognized standards of quality.

Through careful scheduling with the regular classroom teachers, most students in the Middle School attend Chapter 1 during the seatwork period of their regular reading class. Students come at the same time each day and use their contracts which have all the assignments for the week prorated according to ability, difficulty, and time needed by the individual for daily completion. A minimum amount of time is spent waiting for teacher review since students are encouraged to work ahead. Each child has a goal to be achieved each day. For example, on one day a child might work on a unit practice drill on the language master, complete a practice disk on the computer, conference with the teacher on completed written work, and complete a posttest. The Chapter 1 classroom makes maximum use of instructional time through having that time appropriately planned, through using consistent and familiar management procedures, and through providing information for parents so reinforcement is encouraged at home.

The Chapter 1 classroom uses the district instructional management system, the multi-program record keeper, instructional contracts, diagnostic probes, motivational charts, and progress reports to continuously monitor individual student progress. As objectives are introduced and mastered, each student's reading objective card is updated by computer. Before beginning any given lesson in the Tutorial Comprehension program, students enter their name and student code; the multi-program record keeper then automatically posts the results of their performance to their student record. The teacher can access any of these records and receive reports on an individual and/or class performance. Student progress reprts are also generated by the computer and sent home on a quarterly basis with the regular report card. In addition, the instructional contracts are sent home weekly to provide an ongoing report of student progress.

In addition to the close monitoring by the Chapter 1 teacher, the microcomputer provides regular and immediate feedback and reinforcement. In the Tutorial Comprehension Series–for example–when a student gives an incorrect response, the computer not only lets the student know the response is incorrect, but also provides clues such as highlighting pertinent parts of the passage. The student is also given the chance to review the initial instruction on how to use clues to figure out different kinds of questions. Upon daily completion, the student's performance proficiency is displayed visually on the monitor. These results are automatically recorded and available for updating individual contracts, reading objective cards, and motivational charts.

Informal conferences, the reading objective cards, and individual student contracts are also used to provide feedback to the regular classroom teacher and coordinate program efforts with the district curriculum. Telephone and school conferences provide parents with feedback on their child's progress in addition to the student contracts and quarterly progress reports.

A variety of methods are used to reward students for excellence in academic progress. At the Middle School, students working on individual contracts are rewarded through an incentive point system. Upon timely completion of an assignment, one point is awarded; up to three points per week may be earned. Each group seen during the day maintains a running total on the chalkboard that is updated weekly. When a group achieves a set number of points, they are awarded a "FREE PERIOD" during which they may select a reading activity of their choice. A school newsletter is sent home monthly with a section for Reading Room news. Special students are recognized for outstanding effort and progress. These students also receive an award certificate that is placed on a special bulletin board designed for this purpose. At the end of the year, each Chapter 1 teacher has a special awards assembly.

Chapter 1 teachers are recognized through the staff bulletin; when special events occur, a press release is submitted for publication in the local newspaper. There have been several articles on the team effort to acquire and use microcomputers for better motivation and management of student learning. Several of the Chapter 1 teachers have presented at state, regional, and national Chapter 1 and microcomputer conferences. Upon designation as an exemplary program, newspaper recognition within the district was extensive, and program staff are disseminating their program throughout the state in a series of Summer Institutes. They have also participated in the regional conferences designed to present effective practices and sponsored by the U.S. Department of Education.

ORGANIZATIONAL ATTRIBUTES

While the Chapter 1 program staff identified instructional attributes as the strength of the program, it is obvious to them and to any visitor that effective instruction flourishes when there is a effective organization supporting it. The program goals and objectives are clearly stated and well integrated with the districtwide curriculum. The vocabulary selected for development through the WORDMASTER computer program was jointly selected by Chapter 1 and regular classroom staff from the district's basal reading program, content area textbooks, and specific sight word lists. Care was taken by the team of teachers to make sure instructional methods and content matched the district's objectives of what should be taught and mastered at each grade level. Special Chapter 1 objectives were added based on previous experience and program results that indicated remedial students make substantial and rapid progress when they are systematically taught frequently used sight words. When the slower progress of upper elementary students was analyzed, meaning vocabulary was a major factor; the students simply had not been exposed to many of the words one would expect a fifth or sixth grader to know.

The computerized tracking system used for Chapter 1 students is also serving as a pilot test for districtwide computerization of student objective records. The objective cards have encouraged the exchange of information between the Chapter 1 and regular classroom teacher. Regular classroom teachers also feel comfortable in adding vocabulary to the WORDMASTER program used by Chapter 1 teachers. Since the same objectives and the same vocabulary are used in both reading programs, much reinforcement of skills taught in the regular classroom occurs.

Cooperative scheduling allows students of similar ability/reading level to attend Chapter 1 at the same time while not missing any direct instruction in the classroom. Information gained from pretesting by the regular classroom teacher is shared and placement in a reading group within the regular classroom is usually a joint decision. As has been indicated already, student objective cards serve as an important and ongoing communication device between the Chapter 1 teacher and the regular staff.

Parental workshops are held to give parents feedback on appropriate and successful techniques for working with children at home. At the beginning of each school year, parents are informed of their child's participation in the reading program through a letter. The objectives and procedures of the program are explained, and parents are encouraged to ask questions and visit the classroom. A districtwide parent-teacher conference day is held each fall, and quarterly reports prepared by the Chapter 1 teacher the regular report card. Certain contract items are checked and initialed by the parents each week, and the student contract serves as a communication tool with parents as well as a management tool. A Saturday Make It and Take It workshop was held for parents this year, and other workshops have encouraged parents to view and use the computers their children use.

All of the Chapter 1 program staff are certified reading specialists and the Middle School teacher has graduate work toward a doctorate. All Chapter 1 staff voluntarily took courses on computer assisted instruction and computer management systems. In addition, an outside consultant provided inservice training on software and software selection. This training has been ongoing over a two year period. A team composed of district and program staff developed the proposal through which the microcomputer equipment was obtained. This team effort highlighted the need for regular exchange of ideas among staff; thus, a voluntary once-a-month meeting time (the second Monday of each month) is set aside to get together and share ideas. Teachers preview new software and review current programs for new applications. Another effort is underway to acquire more microcomputer equipment for the regular classroom staff, and the Chapter 1 teacher at the Middle School is spearheading the effort.

While it is easy to say that evaluation results are used to improve the program, it is far more complicated to do. However, it is also true that if the evaluation results had not been used in Meramec Valley, the Chapter 1 program would look very different. Using evaluation results, emphasis was placed on vocabulary development to improve achievement gains; gains did improve, but the staff became bogged down in paperwork which cut into effective use of instructional time. A pilot program using the microcomputer as a teacher "aide" proved successful and provided the impetus for a proposal that funded microcomputers in all Chapter 1 sites. All teachers found that

students increased their reading mastery pace, but because of improved management techniques, the reading team also identified a need for specific comprehension skills. The pattern of errors on pre and post tests suggested that a systematic diagnostic-prescriptive approach would be useful. The Tutorial Comprehension Series was obtained and the contractual system was implemented at all sites. Title I/Chapter 1 has always been effective in Meramec Valley, but by evaluating areas of weakness, altering methods, and expanding effective techniques and procedures, they have made a good program better.

Finally, good programs do not get better without strong leadership. The Chapter 1 Director, who has held the position for 15 years, is a full time building principal at the Middle School. He is able to implement needed staff development and oversee proposal development without intervening layers of administration. Effective leadership has allowed a small district with limited resources to develop and implement an innovative use of microcomputers in a Chapter 1 setting. Ideas are freely exchanged between teachers and administration. Good relationships exist among building principals, regular classroom teachers and Chapter 1 staff. When interviewed, the principal attributed program success to the team concept and the willingness of Chapter 1 staff to devote extra time on their own to improve the program. Good leadership provides the atmosphere and the resources to support team efforts.

The Chapter 1 Director believes that his stable, well-trained, and much experienced staff hold the key to effective reading remediation. He also believes that because the remedial reading evaluation goes home with the report card, the program is valued as important by both parents and regular staff. He chafes under student selection guidelines that rely upon test scores too much, he feels, and he would like to hold parent meetings at schools only rather than districtwide. He finds meetings at the school level to be more personalized, more informative, and better attended. He is also concerned about scheduling next year when the same amount of service must be spread over an additional site. Added teacher travel time and less cooperative scheduling could affect the amount andeffectiveness of instructional time.

A positive school and classroom environment is the result of several factors that have been reviewed previously. It is also that intuitive feeling visitors get when they step in the front door of the building. Pacific Middle School was originally built about the time of the Civil War, and the core section remains with many additions about it. The floors are highly polished wood planks, and the walls have colorful student art work and awards liberally placed on them and hanging from doors. There is an energetic hum that tells one this is a warm, friendly, and safe place for children to be about the business of learning. The classroom leaves no doubt that learning is best done in a no nonsense, business-like atmosphere; but, in addition, there is the excitement of computer work and rewards for completing assignments and achieving success. Education can and does work for all students in effective schools and classrooms.

LINCOLN PUBLIC SCHOOLS
LINCOLN, NEBRASKA
Reading (Grades 4-6)
Math (Grades 4-6)

Lincoln, Nebraska is a university and state supported community; it is the home of the University of Nebraska and the state capital. The total population in the school district is approximately 193,000; the school district enrollment is 23,900. The community has a strong network of social service agencies such as family services, the committee for women, and private foundations which help coordinate city and county social services. Although the overall percentage of families below the poverty level is not unusually high, the subset of two schools that were the focus of this study have a low income average of 41% based on the number of students receiving free and reduced lunches. Chapter 1 students in these schools often come from one parent families where there is high unemployment or sporadic employment and a high mobility rate. The language skills of the Chapter 1 students are often less developed than the typical district student. The reading and math Chapter 1 programs in grades 4-6 are pull out programs; the average group size is five students with one teacher. Most of the teacher aides are placed in the primary grade Chapter 1 program.

The district philosophy is one of educational freedom within the structure of educational objectives. The Madeline Hunter Model for instruction is used as the basic philosophy of the district in planning and implementing instruction in all areas. In general, the climate of the Chapter 1 classrom is no different than the regular classroom.

Students are selected for the Chapter 1 program on the basis of teacher ratings of student performance in the regular classroom and scores on standardized achievement tests. An Individual Education Plan (IEP) is developed and revised regularly to keep the needs of each student current. The IEP is computerized to facilitate updates and the production of progress reports. Chapter 1 was the first program in the district to implement a totally computerized management system for IEPs.

The coordination between Chapter 1 and the regular classroom has made this project a successful one. In response to evaluation results, a district Chapter 1 management system was developed. The management system is based on the assumption that a Chapter 1 program is most effective when Chapter 1 and classroom teachers are working toward the same instructional objectives and when the responsibilities of both are clearly delineated. Coordination is done on an individual student basis. The management system provides a flexible set of procedures for coordinating the efforts of classroom teachers, Chapter 1 teachers, administrators, and parents. The management system includes:

(1) procedures for more effectively involving classroom teachers in the selection of participants for Chapter 1;

(2) the use of Individual Education Plans by Chapter 1 teachers; these are developed jointly by classroom teachers and Chapter 1 teachers;

(3) the involvement of parents in their child's education program;

(4) the careful sequencing of activities to insure effective coordination.

To further promote coordination of Chapter 1 with the regular program, the Individualized Education Plans are based on district goals and objectives. The project goals have been developed cooperatively by project staff, curriculum consultants, and parents. The management scale is utilized to ensure that project objectives are attained and reinforced. Student progress is also based on the achievement of district objectives. Daily feedback is given to the student on the achievement of objectives. Chapter 1 teachers and classroom teachers review each student's progress weekly by written or oral communication. This weekly coordination is a project requirement at the building level. Parents receive written quarterly reports on their children's progress; a minimum of two parent conferences are conducted with both the classroom teacher and the Chapter 1 teacher present.

The building principal also assures coordination of supplementary Chapter 1 instruction through regular monitoring of both the classroom teacher and the Chapter 1 teacher. To further emphasize communication as an ongoing and vital aspect of the Chapter 1 program, Chapter 1 principals meet monthly; a steering committee of Chapter 1 principals also meet with the Director of Federal Programs. In one of the schools studied, the principal shows support for the Chapter 1 teachers by giving them a "gift of time" when the principal takes over the teaching of their Chapter 1 classes for a designated time period.

As the Lincoln Public Schools is a decentralized school district, each individual school designs a Chapter 1 program to supplement the reading and mathematics program of the respective school. Individual schools devise different activities at building level to encourage and challenge the students. Rewards of free choice activities, stickers or other means of recognition are used with individual students. Outstanding teaching is recognized through a staff development program which allows outstanding teachers to share their expertise with others. Certificates of recognition are awarded. The Superintendent of Schools' pin for outstanding achievement has been awarded to individual Chapter 1 staff.

In order to meet the needs of the Chapter 1 staff, inservice is provided on a monthly basis. Inservices offered include general preservice training offered to teachers, tutors, and aides; computerization of the Individual Education Plan; teacher rating procedures; and activities to reinforce the supplementary teaching of reading and math.

A strong Parent Advisory Committee exists. This council consists of Chapter 1 parents, staff, and community members representative of community agencies. The P.A.C. meets monthly for the purpose of planning, evaluating, and giving general support to the project. Each building develops an annual plan to provide opportunities for parents to be involved in the instructional programs of their children. This includes volunteering in the classroom and special parent meetings at the school level.

An open meeting is held in May of each year to inform the community of the evaluation of the Chapter 1 program and to plan for the following year's program. The evaluator also meets with each individual school's Chapter 1 staff and principal to review the individual school's results. Individual Chapter 1 school staff share the results with the parents.

A tightly controlled Model A evaluation design is used in the project evaluation. Teachers are inserviced on test administration before testing is conducted. To prevent conversion errors, raw scores are converted to NCE scores using a central computer. In the schools focused on in this study which serve children with lower pretest scores than the district average, evaluation results show that the Chapter 1 program is effective. Sustaining effect studies also provide evidence that Chapter 1 has a sustained effect in both reading and math.

BROKEN ARROW, OKLAHOMA

Broken Arrow, Oklahoma is a fairly affluent suburb, a bedroom community of Tulsa which is growing rapidly. The school district's enrollment has increased from 3,000 to 55,000 in 25 years. Most of the people residing in Broken Arrow are young and highly mobile. Many are single parents. For example, in a class of 28 elementary students, eight lived with both parents. There is no segregation of wealthy or poor communities in Broken Arrow. Rather there are pockets of low income families in the affluent neighborhoods. Ninety-five percent of the students in Broken Arrow are white, only 4.7 percent of the children live in families whose income is below the federal poverty line. A high percentage of Broken Arrow's high school graduates go on to college. The only characteristic that set the Chapter 1 students apart from the other students is SES and mobility.

The Chapter 1 program serves 416 students in reading in grades 1-3 and in mathematics in grades 3-5 at a per pupil cost of $500. All eight Chapter 1 teachers have masters degrees and five years of classroom experience.

A variety of measures are used to select students for the Chapter 1 program, including formal and informal student evaluation data and teacher opinions. The fourth grade students pretest score average is slightly below the 20th percentile. The fifth grade average pretest score is slightly above 20%. The goals of the Chapter 1 program are to remediate specific reading and math deficiencies to motivate students to work at their highest ability levels. High interest materials and activities are used to build student confidence as is with positive reinforcement of student effort. The Chapter 1 staff consult with regular classroom teachers, principals and parents about providing basic skills instruction to Chapter 1 students. Chapter 1 provide staff development for regular classroom teachers in excellent math and reading materials, activities and teaching techniques. The staff also provides information to principals, teachers and parents about methods, materials and student needs.

There is very close integration of the Chapter 1 program into the total school program. Chapter 1 students are encouraged to participate in all district sponsored activities and competitions. Chapter 1 teachers not only provide ongoing support in instructional techniques to regular classroom teachers, they also participate in district committees such as curriculum committees. Regular classroom teachers and Chapter 1 teachers work together to meet school district requirements. They meet together weekly to discuss student progress and set objectives for the next week. The Chapter 1 teacher participates in parent conferences and weekly staff meetings. While supervised by the Chapter 1 coordinator, principals work closely with Chapter 1 teachers in support of the Chapter 1 program.

Students receive personal directed instruction. Teachers use a variety of methods and materials including computers. Lessons are structured to provide both success and challenge, and are oriented to mastery learning. Once a skill is mastered a new one is introduced. Teachers are questioning techniques to foster higher order thinking skills. Materials are ready when students enter the classroom. Students are taught to work independently. They feel comfortable in Chapter 1 teachers and are motivated to them.

Students are well disciplined. Chapter 1 teachers make sure each student leaves each day feeling successful.

Student progress is closely monitored. Anecdotal visits are kept and patterns of errors analyzed. Information about student performance is used to determine student needs. Happy notes are sent home to parents reporting good work and students receive awards such as popcorn parties, award certificates, stickers and badges.

An activity report is sent home to parents each week with activities to reinforce newly acquired skills. Parents are advised of ways they can help their children including being sent booklists and suggestions for math activities that can be done with everyday events such as cooking. Teacher-made materials are also sent home as in a project calendar which encourages parents to record the amount of time they read to their children each day. Reports of this time are sent periodically to the teacher. Fact master guides are also sent home to encourage parents to work on math facts with their children. Make and Take workshops are held for parents twice a year. Parents also volunteer to work with students in the classroom.

Parents also receive weekly progress reports, which they review, sign and return. Parents are invited to a mid year conference to help plan the upcoming Chapter 1 program.

The principals act as instructional leaders. They are knowledgeable and take an active role in evaluation and curriculum design. Each conducts a curriculum meeting every 2 weeks which is devoted to staff development and problem solving. Teachers have other staff development opportunities, including annual State Department of Education conferences in instructional strategies; annual state, regional and local meetings in both reading and math; local and state workshops; summer institutes offered by area colleges and universities; and local staff development presentations offered throughout the year.

Teachers receive notes of appreciation and verbal praise from the Chapter 1 coordinator for outstanding contributions. Teachers are also nominated for awards of excellence given each month by the Chamber of Commerce. Several Chapter 1 teachers have received the award.

Evaluation of the Chapter 1 program includes pretest and posttest analyses using standardized tests, counts of the number of books each student has read and the number of math facts each student has mastered. The extent of parent involvement is also evaluated.

Information about the Chapter 1 program is disseminated through local newspapers, district publications, and presentations to civic organizations.

PORTSMOUTH SCHOOL DEPARTMENT
PORTSMOUTH, RHODE ISLAND

This school system is located on Aquidneck Island in Narragansett Bay about 22 miles southeast of Providence. Total area, land and water, is 59 square miles. The school offices are located in Portsmouth which is a residential community. Portsmouth has been described as both rural and small town. A large percentage of local employment is in the high-tech field; engineering, computing research, etc.

Total population in the school system is about 14,000. Total district enrollment, grades K-12, was about 2,700 during the 1983-84 school year. Student teacher ratio across the 13 grades was 14 to 1.

Portsmouth's school population is predominantly White, not of Hispanic origin (97%). About one and one-half percent were classified as Asian or Pacific Islander, about one percent were classified as Black, not of Hispanic origin and less than one percent were classified as Hispanic and American Indian. The population in the system is currently quite stable with about five percent of the students in the district coming from low-income families.

The Reading Instruction and Pupil Personnel Services (RIPPS) project which qualified for U.S.D.E. recognition serves almost 250 students from public and non-public schools in grades K-11. The percentage of students from low income families in the four schools which contain grades 4, 5, and 6, is about the same . . . about 4 to 5%. About 60% of the students come from managerial and professional families, 19% from skilled trade families and 4% from skilled and office career families. The remainder come from a variety of occupations. Because of the low poverty level in Portsmouth, the program receives minimal federal funding. There are students in Portsmouth, however, who need compensatory programs, so federal funds are supplemented by local funds to maintain a quality program.

Ten teachers and pupil personnel staff provide services to students in five schools in the district. All teachers and counselors have a minimum of a masters degree. Two counselors hold degrees beyond the masters level. Reading teachers are all state certified. All staff members working in the RIPPS project have been there for at least eight years.

The primary educational need of their Chapter 1 students is reading. The need is identified by an annual needs assessment which includes questionnaires to Chapter 1 parents and all certified school staff. The district-wide spring test results are also used to identify need. Students are selected using a combination of spring SRA Achievement Test scores and classroom teachers' recommendations. These two pieces of information are combined into a single score. These composite scores are then ranked from lowest to highest and the students are selected by starting out at the bottom of the list (those students with the greatest need). Students are selected by continuing up the set of scores until the maximum number of students which are allowed according to the project description. During the 1983-84 project year, estimated Chapter 1 per pupil cost was $689 or about $1,100 if all funding sources are counted.

This project was cited by U.S.D.E. for superior performance with regard to three of the 13 characteristics of effective programs: clear project goals and objectives, coordination with the regular program and parent and community involvement. School system staff cite these three areas as contributing to the success of the project as well as high expectations of the teachers involved and having employed highly trained professional staff. As with other successful projects while some areas stand out as providing a unique contribution to the success of the project, none of the elements really stand alone. There is a healthy interaction among most all of these characteristics which contributes to the project's success.

The RIPPS project has goals in both the cognitive and affective areas. These goals are developed on the basis of an annual needs assessment and from input from both parents and teachers. The goals are used by the reading teachers as the basis for individual conferences with parents and students. Each area, cognitive and affective, is evaluated using a pre-post design and the results are reported to the state Chapter 1 office. Although in a different format, these evaluation results are also shared with other staff members and parents. Testing results related to accomplishment of individually established goals are discussed in person with each student's parents. In addition to assessment of cognitive goals by use of achievement tests, affective goals are assessed by use of rating scales. Both parents and teachers rate students in the project in terms of self concept and school attitudes. Though stated in general terms the broad goals related to improving students' readiness or reading and improving students' attitudes about learning and self concept are also translated into an individual statement. By so doing for each student, individual progress may be monitored as well as progress of the group as a whole.

Coordination between the Chapter 1 project and the regular school program appears as a significant factor. Reading specialists (Chapter 1 teachers) have two primary functions. They act as supplementary remedial teacher to the students and as a consultant/resource person for the classroom teacher. Chapter 1 and regular classroom teachers jointly develop a prescription or course of instruction for each student in the project. Instruction is provided individually, in small groups or within the student's regular classroom. Chapter 1 teachers work on the concepts, using the same materials as the classroom teacher. The Chapter 1 teacher does preteaching and reteaching of the concepts and skills presented in the regular classroom. Remedial and classroom teachers tailor instruction and schedules for students. They are partners in the process of instruction and keep each other informed about progress so that modifications can be made to meet student needs. The diagnostic, prescriptive, remedial approach utilized by RIPPS is not seen as a separate functioning project but rather as an integral part of the total school program ... one of the keys to overall success.

Parental and community involvement is another area which contributes significantly to the overall success of RIPPS. Parents are contacted and personally interviewed prior to their child's participation in the project. During the course of the year, a minimum of two additional meetings are held with parents. If additional meetings are felt necessary, they are scheduled. Parents and teachers, using information from the needs assessment, pretest and daily classroom performance of the student, prepare and modify an individual reading prescription. Pooled across students, parent

and teacher questionnaire results (the annual needs assessment) are used to monitor and revise the project if necessary. Thus, parents are not only involved in assisting with the program of instruction for their own child but contribute to the overall planning and evaluation of the project. Parents are also involved in a 10 week program called Parent Study Group. This program is undertaken to help parents get a better understanding of their child and their behavior. The goal is to improve chances for the child to function more effectively at home and at school. Finally, there is a Volunteers in Schools (VIS) program which trains participants as reading tutors. Participants are parents and non-parents. Once trained, VIS tutors work closely with the reading teacher whenever they are assigned to assist a RIPPS student. VIS is supported through Chapter 1 and local funds.

Staff at Portsmouth also feel that high expectations for student leaning and behavior are an important contributing element to the success of the project. All staff working in the project feel that students must be shown that the staff is confident that they are capable of learning and that opportunities for success and positive feedback are maximized. One way of demonstrating this is to show a genuine interest in the students, as individuals, not to have them feel that they are just another member of the RIPPS group. Strong leadership and a well trained staff play an important role in this area as well as some of the other areas already cited. Not only do building principals provide the leadership necessary, it is also evident that leadership is present at the system level (in the curriculum area, project coordination, etc.) and at the building level (counselors, Chapter 1 teachers, regular classroom teachers, etc.). Without leadership and cooperation at all levels, the project would not be as successful as it is.

Closely related to the areas mentioned above are three other characteristics of this project which contribute to success - methods and approaches, maximum use of learning time and school/classroom climate. The project uses a combination of pull-out and in-class instruction. The team work of educators, parents, administrators and specialists provide children with the kind of opportunities they need to improve their reading and to improve both academic and social skills. One word is involvement, total involvement! The kind of involvement seen here is needed, not only for the proper approaches to the actual teaching process, but in terms of providing the kind of atmosphere needed to foster learning. The atmosphere here is warm, friendly, and firm. Disturbances are minimized which encourage and promote time on learning tasks. Time on task is also increased by the method of instruction, by grouping students to best deal with their strengths and weaknesses and by the use of parental help with assigned homework.

Closely monitored student progress also appears to be a contributing factor to the success of RIPPS. Standardized testing and teacher input provide for decision-making regarding entry into RIPPS. Once in the project, which is described as an "open entry", "open exit" project, diagnosis provides for prescription of each individual's needs with specific objectives identified to remediate those problem areas. The instruction that takes place by cooperative efforts of the Chapter 1 teachers, regular classroom teachers and counselors, provides an on-going picture of the student's progress. This effort either identifies new objectives which may lead to additional diagnosis or termination from the project and placement back in the regular classroom with no further remedial instruction. Studies related to exit/no-exit have

indicated that students who participated in RIPPS for two consecutive years continued to increase their NCE gain during the second year in the project. Students who were in RIPPS for one year did not continue to increase NCE gain one year after release. Results of these sustained effects studies have impacted on project policy decisions regarding exit/no-exit.

In conclusion, it must be stated that most all of the 13 characteristics of effective programs contribute to the success of RIPPS. However, they should not be looked at in isolation. There appears to be a very positive, active interaction among all of these factors. As with other successful projects, integration of the Chapter 1 project with the regular program, participant enthusiasm and cooperation (staff, students and parents) and commitment of those involved with RIPPS seem to be consistent with superior performance.

DILLON, SOUTH CAROLINA

Dillon, South Carolina is halfway between New York and Florida, a rural farm community miles from the nearest urban center. Dillon has little industry and a struggling agricultural economy. Like most American farmers, those in Dillon are just barely surviving and doing that solely as a result of federal tobacco subsidies. Dillon County has the third highest adult illiteracy rate in the state. Because of the poverty and illiteracy, there is adequate support for education–financial or moral.

Dillon has a population of 18,650. There are 4,800 students in grades K-12. 1,100 attend Gordon, the only school serving grades 4-6. Seventy-two percent of the district's students are eligible for free and reduced price lunches, 33% of the students live in families whose income is below the federal poverty level. The Chapter 1 program serves 180 students in grades 4-6 for an average per pupil cost of $382. The classrooms are located in trailers. The average reading pretest percentile for Chapter 1 students in grades 4 was 2. For fifth grade it was 2 and for sixth, 4. For math the average pretest percentile was 3 in grade 4, 8 in grade 5, and 6 in grade 6.

Few of Dillon's students are average. More than 50% of the students consistently score below the 50th percentile on standard tests. Gordon's solution to meeting the individual needs of their students, given their widespread abilities, is to ability group the students. There are 14 self contained, ability grouped classes in each of grades 4-6. The students spread themselves racially across the ability groups (i.e., there are white and black children in each of the ability groups in every grade). Because the school system has been able to meet the needs of students, regardless of ability, parents feel their children are receiving the best education. Thus, there has been no "white flight" from the Dillon public schools.

While Gordon's classes are ability grouped and the lower ability groups have a higher teacher-student ratio than higher ability groups (1:24 and 1:28, respectively), there is still a critical need for Chapter 1. The Chapter 1 program uses a deficiency model for instruction - diagnosing each student's basic skill strengths and weaknesses and then remediating the weaknesses while reinforcing the strengths. The regular classroom teacher does not have the time to do this, nor the luxury of small enough groups to effectively provide this form of instruction.

While Dillon's Chapter 1 students have many factors which predict low performance in school, the Chapter 1 Director, John Robinson, initially believed and now has proven that the students were capable of much more than they were being given credit for - by their parents and the school system. While he was the principal of Gordon, John Robinson set out to prove that what the students needed was the belief that they could and should do well in school. First, he sold the teachers at Gordon on this belief and then enlisted them in helping him convince the students and parents. Efforts included explaining the importance of standardized testing to the students and helping them to interpret their scores, not in terms of posttest percentiles but in terms of growth. The students now have a better understanding of interpreting their test scores than the Chapter 1 teachers did several years ago. The students were told they were capable of improving their status, regardless of

where they started, and were expected to do so. Then a plan was implemented to motivate the students to learn, including hand stamps, field trips, trophies, awards, ceremonies, parades and pictures in the paper. Without charging personnel or materials, Chapter 1 student test scores showed improvement. The student performance has continued to improve and the Chapter 1 program is consistently improving the program they deliver to their students, including the recent introduction of microcomputers for both instruction and student performance data management. The Chapter 1 coordinator, with the cooperation of Gordon's principal, assures the continuance of quality instruction by closely monitoring the Chapter 1 teachers effectiveness.

Students are selected for the Chapter 1 program based on standardized test scores and teacher judgment. Chapter 1 is scheduled so it does not interfere with the instructional time required by the South Carolina Defined Minimum Program. Individual student needs are diagnosed and consistently monitored through teacher observations and checks of student work. Students are placed in the curriculum based on a detailed diagnosis. The curriculum is designed as a skills continuum that emphasizes skills mastery. The classroom is well managed and students take responsibility for their own learning. They are taught to work independently, to manage their own time and materials and to follow a few study skills rules. The teacher provides support, understanding and patience. There are high expectations of each student and lessons are structured to provide both challenge and successes. Students are encouraged to participate in district activities and competitions. Student progress is monitored continuously: each student receives written feedback of progress each day. Students who meet their educational goals each year are taken on a field trip. Because of the support and challenge, students enjoy Chapter 1 and come to the labs during recess and after school.

Progress reports are also sent to the regular classroom teacher. The Chapter 1 teacher has scheduled planning time in which to organize and plan for instruction and to meet with regular classroom teachers daily.

Chapter 1 teachers also send progress reports home as well as student activity sheets to reinforce newly acquired skills and practice sheets for review before tests. Math fact and measurement tables and oral reading/comprehension booklets are also sent home. A Chapter 1 newsletter is sent home to encourage assistance from parents. Parents are asked to examine their child's papers, encourage the child's best efforts and good sleeping habits. Parents are attracted to school open houses by involving students in a "Follow Me" through the lab activity during which students demonstrate skills they have mastered at each work station in the lab.

Gordon is proud of its Chapter 1 program and the students in the program. High visibility is given to the program, including coverage in the local paper and on the radio, and a Chapter 1 float in annual parades.

ABILENE, TEXAS

Abilene, Texas is a small urban area with a population of 95,000. Established by cattlemen as a stock shipping point, it later became a major cattle producing area with diversified farming. In recent years, oil has added to the city's economy.

The Abilene Independent School District has an enrollment of 17, 174 in grades K-12. The Chapter 1 program employs 10 teachers and 39 aides and serves 1,519 students in grades K-6 at an average per pupil expenditure of $563, 46.00. The K-1 program is a preventative developmental perceptual motor program. The program for grades 2-6 is a remedial reading and math program. The programs are conducted in a pullout lab with a teacher-student ratio of 1:5. Sixty-eight percent of the districts students are white, 21 percent are hispanic and 10 percent are black. Twenty-one percent of the children are from low-income families and 13 percent are living in families whose income is below the federal poverty line.

Multiple criteria are used to select students for the Chapter 1 program. Criteria include standardized test data, student behavioral characteristics, current student record data and teacher recommendations. The Chapter 1 program conducts an annual needs assessment which involves principals, teachers, aides, school counselors and parents.

The program provides for instruction to meet individual student's needs. To accomplish this, students are given diagnostic tests to identify each students' instructional level. Then lessons are taught at that level. Students receive both guided and independent practice from teachers, aides, and computers. The materials used are closely correlated with school objectives which have been drawn from The Essential Elements of Texas. There is close coordination between the regular classroom program and the Chapter 1 program. Every fall, the Chapter 1 personnel are given a preview of the regular curriculum for the coming year. The regular classroom teacher lets the Chapter 1 teacher know weekly which objectives she will be teaching. Daily written communications are sent to the Chapter 1 teacher informing her of what each individual student is working on in the regular classroom. The Chapter 1 teacher sends weekly progress reports to the regular classroom teacher and daily information about student progress on particular objectives. Once every six weeks the Chapter 1 teachers conduct formal coordination meetings with the regular classroom teachers. In addition, regular classroom teachers schedule visits to the sites to observe their students at work.

Students are rotated between instructors and machines so that they work with all instructor. Individual differences are taken into account in assigning a student first to a teacher or a machine when working with a new skill. Students progress through sequential skills and work at a level where they are challenged but able to succeed. Students are required to manage their own materials and transitions. Thus, they are taught to maximize their learning time. The Assertive Discipline Plan is used so there is good classroom management. Students have learned and are expected to follow rules for study skills and good work habits. They are responsible for their own learning and their own work space.

Chapter 1 classes are scheduled to be truly supplemental. There is a remedial/enrichment period in every school's schedule so that Chapter 1 students do not miss any instruction in the regular classroom. Chapter 1 students report to the lab at the period following their reading or mathematics lesson so as to maximize the interface between the two lessons. Student progress is monitored daily and checked with the student, then reported to both the regular classroom teacher and the parents. Weekly, a report of student progress is shared with the classroom teacher.

Administrative staff, particularly principals, are actively involved in the Chapter 1 program. Principals supervise the Chapter 1 teachers and aides in their schools. Central office staff visit each school twice a week. On their visits they observe lessons in the labs, give demonstration lessons and check student progress reports to make sure Chapter 1 instruction coincides with what's being taught in the classroom.

Students receive a variety of rewards, including rewards for satisfactory completion of their work, stickers for mastering an objective, ribbons for mastering goals, student of the month posters, student work displayed on bulletin board and lavish praise, smiles and touches. Teachers also receive praise and notes of appreciation from principals and other supervisors. They are also selected to present outstanding ideas at inservice training sessions. Students are encouraged to do their best work and to improve every day.

Chapter 1 students are encouraged to enter contests sponsored by the school district (e.g., writing, reading, math, and citizenship contests). They provide tutoring and read to younger students. They go to homes to read to senior citizens and are involved in PAC presentations.

Parents are actively involved in their children's instruction. There is an active PAC that coordinates both parent involvement and involvement of Chapter 1 with the community. The PAC is responsible for disseminating information about the Chapter 1 program with the assistance of the school district. They also have a member who attends PTA executive board meetings to represent Chapter 1 parents. The PAC also serves to notify parents of events, phoning each parent and scheduling meetings so the majority of parents can attend. They also arrange for babysitting during meetings. Parents are invited to come to the Chapter 1 lab and work with their children on assignments. Student work is sent home daily. Announcements of skill mastery are also sent home. They also receive an activity calendar with math and reading activities to do at home. Games are sent home for the parents to play with their children which reinforce newly acquired skills. There is also a computer-take-home program. Parents taught to use computers so they can work at home with their children reinforcing newly acquired skills.

Staff development consists primarily of inservice training. At the beginning of each school year, Chapter 1 personnel become familiar with the regular school curriculum, they also receive training in effective teaching techniques. All staff are kept up to date about innovations in education.

All these sessions include in-depth hands on training. Chapter 1 staff also receives on-going developmental throughout the year which is provided by

the school district. Finally, Chapter 1 staff participate in state and national meetings.

TACOMA, WASHINGTON CHAPTER 1 PROGRAM

The Tacoma School District #10, has been asked by the State Department to apply for exemplary status for two consecutive years. They have declined, but are clearly regarded as exemplary within the state. The superintendent described the most recent state audit of the program as "the most positive evaluation I've ever seen."

The community is the least affluent in the area. Tacoma is a blue collar community, historically dependent on the (currently depressed) lumber industry. The district is 70.2% Anglo, but Chapter 1 is 45% minority. Among Chapter 1 schools the range of percent students on free or reduced lunch is 36% to 95%, with a mean of 47.19%.

Chapter 1 spent an average of $661 on the 2123 students it served last year.

The Tacoma program is exemplary for two reasons. 1) Managerial attention to both the "big picture" of children's educations and administrative detail, and 2) Administrative skill at managing diversity. Tacoma is philosophically dedicated to school site management. Within (broadly defined) reason, each school is expected to conduct its own needs assessments, and chart its own responses to the needs it finds. At Tacoma, this is not a set of pie-in-the-sky truisms. The 24 public and 3 parochial Chapter 1 schools' programs differ substantially. At one school, the Chapter 1 focus may be on upper-elementary mathematics. At the next, half the Chapter 1 money may be spent on a pre-K readiness program. A neighboring parochial school may spend 100% of its Chapter 1 money on computer assisted instruction. What is amazing is how well the over-all system seems to work.

In all Chapter 1 schools, students scoring lowest on a local Criterion Referenced Test are admitted. Exceptions, based on the recommendations of an educational team, are allowed. Most frequently, these exceptions are the result of a student being sent to a special education classroom.

The objective of Chapter 1 in Tacoma is clear: Every Chapter 1 student is expected to show greater gain on the local CRT than the district average.

Coordination efforts are intense. Each school is required to focus on district-wide Student Learning Objectives. Schools are free to choose their methods, but their objective may not vary. Curriculum articulation within schools is intense, and typically directed by the principal and the Chapter 1 teacher.

Chapter 1 teachers are selected from among the leaders of a school, and are in good positions to step into more formal leadership roles. As was the case at Arapahoe, Chapter 1 teachers are often in daily contact with regular classroom teachers.

The program makes a concerted, ongoing effort to maximize parental involvement. The district continues to maintain its district level advisory council. The council meets eight times a year. A Parent Observation Program organized school visitations in teams, and makes recommendations to the advisory council. The Chapter 1 program maintains parent

coordinators at four schools, and recently published an attractive, professionally quality, parent's handbook.

Regarding professional development and training, the director stated "We do a lot of this." There are special Chapter 1 workshop days. Topics are targeted to perceived needs. Every teacher in the district is allotted six professional development days. Teacher assistants receive 21 hours of additional staff development activities per year.

Staff development was not so much targeted at remediating weaknesses as at building new strengths. The director tried to avoid having to deal with weaknesses by hiring very carefully. When staff development failed, however, he would quietly move in and work toward moving the problem teacher out.

The director saw his leadership as a matter of "near continual communication." Chapter 1 people throughout the district are kept aware of current events and problems within the program. The director's door is almost always open. The director described his two assistants as being "Out there running their wheels off." One of those assistants informed me that his goal was to be in schools 80% of the time. Those assistants have a remarkably detailed knowledge of staff and, in many instances, students.

The leaders clearly view the spotting of new ideas/methods/materials, and making those available to staff, as two of their key functions. For example, the administration had been studying alternative forms of CAI for several years. Chapter 1 staff visited five different CAI programs/sites on the west coast, and had four corporations make presentations in Tacoma. Four public and two private schools chose to implement new CAI programs in FY86. They chose two different models, defended their choices, and the district Chapter 1 office supported their choices. Management of excellence through diversity. A textbook case.

Decisions about instructional materials and methods are handled at the school site level. District Chapter 1 personnel simply try to assist site personnel in making sound decisions, and in supporting them with materials and other resources. A concerted effort is made to keep "decisions close to kids." As was the case with the CAI moves, the director attempts to influence decisions by "holding out big carrots, and hoping some (schools/staff) will bite."

There is a substantial focus on providing high-quality instruction in Chapter 1. Within that framework, chosen directions are diverse.

High expectations are the rule in Tacoma Chapter 1. The director stated "They (Chapter 1 teachers) believe they have impact. They simply assume that students can learn." In the classes I observed, the teachers and aides clearly transmitted that assumption to their students through their actions. They were task oriented, and assumed that their students could keep up.

School/classroom climate: the director believes that each teacher must "Find and work within a comfort zone. Be sure to cover the rules and regs., then focus on the needs of kids. We (central office) back 'em up with support services." Chapter 1 is highly supported within the buildings. High quality,

experienced teachers apply for open Chapter 1 positions. Staff turnover is substantially below the district average.

The district's Student Learning Objectives serve as a focus for monitoring student progress. Staff at the building level meet with regular teachers on an ongoing basis. Chapter 1 progress reports are made to parents three times each year, and individual parent conferences are scheduled twice each year.

As was the case at several exemplary projects, Tacoma's Chapter 1 director consciously does not reward specific teachers or schools. He is interested in the welfare, and the moral of the entire project.

Individual or team student excellence is regularly rewarded within particular schools.

Evaluation data is closely monitored. For example, the upper grades' Chapter 1 math students have not outgained the district average in math for two consecutive years. Chapter 1 teachers have been made aware of this problem and efforts are being made to improve the situation. If those school-level efforts do not produce results this year, then upper grade math will become a district-wide Chapter 1 inservice focus next year.

The director describes the success of Tacoma's Chapter 1 program as boiling down to three components:

1) Keeping decision making close to the student,
2) Selecting and maintaining a high quality staff,
3) High staff moral.

The site visitor would add a fourth: the skill and determination to manage such diversity without losing practical instructional quality control.

OHIO COUNTY SCHOOLS
WHEELING, WEST VIRGINIA

This school system spans the state from Pennsylvania to Ohio in the northern panhandle. The county covers 106 square miles. School district offices are in the eastern part of Wheeling.

Total population of the county is about 62,000. Wheeling, the largest city in the county, has a population of about 45,000. Total district enrollment, grades K-12 was about 7,500 during the 1984-85 school year. Student teacher ratio across the 13 grades was 16-1.

Ohio County Schools' population is predominately White, not of Hispanic origin (93%). Only about 6% in the school district are Black and the other three racial/ethnic categories each account for less than 1%. Nevertheless, the percentage of students eligible for free and reduced lunches is high, about 31%. Over the last few years, total district enrollment has been steadily decreasing and the percentage of students from low-income families has risen sharply. The county has a 15% unemployment rate as more and more local businesses are shutting down operations or moving out of the area.

The Basic Grants Reading Project which qualified for U.S.D.E recognition provides services to about 300 children in grades 2-6. Project participants are from both public and non-public schools. There are about 100 students in grades 4, 5, and 6 in three pubic and three parochial schools. The percentage of students from low income families varies greatly among the three public schools. Ninety six percent of the students at the elementary school in Wheeling are from low income families. The other two public schools have 62% and 40% of their students who come from low income families.

Three teachers provide services in the three public schools while the parochial schools are served by one teacher. All teachers are certified. Two teachers have additional background and expertise in English. Experience of the teachers ranges from 12 to 28 years.

The primary educational needs in this reading project were described as phonic analysis and reading comprehension. These needs were determined by diagnostic testing with the California Achievement Test, Reading. A Test Evaluation Committee meets to review current diagnostic procedures. Students in the program were selected by teacher recommendation and a percentile score of 40 or less on the Gates-MacGinitie Reading Test. Estimated per pupil cost of the project during the 1983-84 school year was $525.

Of the 13 characteristics of effective programs, this project was cited as particularly exemplary in the areas of coordination with the regular program, high learner expectations and professional development and training. As one would expect, it was obvious that none of the 13 characteristics stand alone nor do the three that were cited by U.S.D.E. As with other exemplary projects, there was, and continues to be, a healthy interaction among the 13 areas.

Coordination between Chapter 1 and the regular program did seem to be a major contributing factor to the success of their reading project. What strikes

one is not the words describing plans for coordination but the actions taken by the teachers, administrators (principals and curriculum and instructional staff) and the students themselves. These actions, such as developing lesson plans, modifying instructional objectives or strategies, etc., take place daily, not weekly or monthly. Students in the project benefit from coordination between Chapter 1 and regular classroom teachers. These teachers jointly develop an Individual Education Plan (IEP) for each Chapter 1 student. The plan is dynamic in the sense that it is reviewed and modified by both of these teachers throughout the course of instruction. This type of coordination and sharing of information, indeed all of the interactions among those involved in the Chapter 1 project and the regular program has a very positive effect on the students. While one cannot isolate coordination completely, it does appear to be one of the most important factors contributing to the success of the project.

Teachers, both Chapter 1 and regular program, are involved in a staff development project called Teacher Expectations for Student Achievement (TESA). This project has been very successful in helping teachers to learn to develop high expectations for students. Low achievers are given many opportunities to participate in class and ample time to respond in the class once they are called upon. Teachers work in close proximity with the students. Teachers praise students frequently. One result of this approach is a change in attitude by the students. The students learn that they can be successful. Chapter 1 students in one of the elementary schools become leaders for the entire school by planning and implementing an annual carnival. Students are assisted by parents and teachers but they have the ultimate responsibility for the entire affair. In addition, students are encouraged by parents and teachers to get involved in regular programs offered by the schools such as music, swimming, after school enrichment, etc. With few exceptions, students, teachers and parents learn that achievement can be fostered and participation in regular school activities can be improved.

A key factor in the professional development and training area is the use of the staff development project called Teacher Expectations for Student Achievement (TESA). As mentioned earlier, this staff development project seeks to help teachers avoid disregarding low achievers. TESA centers on how low achievers are often disregarded in favor of high achievers and how teachers can help students improve skills by having higher expectations. The project not only seeks to change the teachers' attitudes and behaviors in the classroom but to impact on achievement by improving the students' expectations as well. Beyond TEA, there are other regularly scheduled inservice training programs dealing with instructional strategies, an orientation program for new Chapter 1 teachers and opportunities to attend annual regional conferences.

Highlights of the other characteristics include well defined, measurable goals and objectives for the reading project. The goals and objectives are reviewed annually and revised by the principal and teachers, if warranted, on the basis of the needs assessment data. Beyond annual definition of goals, they are reviewed throughout the year and communicated to regular program teachers, parents and the general community.

Parent involvement and active participation is encouraged by frequent PAC meetings. Parents also participate in Chapter 1 workshops, assist with student homework and help with the county's tutorial program.

Leadership within the school system is seen at all levels - system, building, and classroom. Community polls indicate a high regard for principals, teachers and students, a reflection of the positive impact of the entire Chapter 1 and regular program activities. None of this could be accomplished without the kind of leadership and cooperation needed to design, implement and monitor a successful project.

One of the unique features of this project is the manner in which it is conducted. The project uses a combination of in-class and pull-out instruction which results in a very high degree of cooperation between the Chapter 1 and regular program teachers. These teachers share lesson plans with specific objectives identified for each student. These Individual Education Programs (IEPs) identify strengths and weaknesses and target specific activities to meet the student's needs. Subjects are pretaught, taught and retaught resulting in a high degree of time on task for the students. Because of the close working relationship of the Chapter 1 and regular program teachers, each knows exactly where the student is in relation to their IEP. Individual objectives, materials, and strategies are selected for each student on the basis of results from diagnostic testing. Close monitoring of student performance, frequent positive reinforcement and good parental involvement, especially with homework, seems to be a set of key factors which help ensure the success of this reading project.

Another area which contributes to the overall success of this project has to do with the school and classroom climate. The school system provided training in Assertive Discipline. These teachers now stress the need for well disciplined, task oriented students. The bottom line here is that, "Students have the right to learn". Therefore; disruptions are not tolerated. This attitude impacts on the time students devote to learning tasks and seems to have a very positive relationship to their achievement. Another indicator of the success of this aspect of the project is reflected in a 50% decrease in the number of referrals to principals over the last few years.

The method of instruction, in-class, and other activities such as mentioned above increases students' time on task. There is homework policy for all students based upon individual needs. The attitude is, "Time must be devoted to learning activities or nothing will be learned". This is one of those axioms to which many other school systems seem to give lip service but which few practice such as this school system and this project.

Finally, student progress is looked at by pre and posttesting and daily evaluation in the classroom by both the Chapter 1 and regular classroom teachers. Daily notations are also made in the IEP and it is modified as leaning takes place. Closely related to these monitoring processes, students are given progress reports and frequent classroom feedback. Certificates to reward achievement are used with students as well as postcards which are mailed to their homes as a positive feedback tool. And annual banquet is held which further affords the opportunity for the staff and students to be recognized.

In some regards it is folly to look at the characteristics in isolation. Each of the 13 characteristics of effective programs mentioned here are so closely interrelated that: "You can't have one without the other(s). If I were to choose a few words to summarize why I feel the program is excellent, I would choose words such as: enthusiasm, cooperation, integration (of the Chapter 1 project and the regular classroom program), skill, experience and commitment. The data which appears on the following page cannot do justice to describing the success of this project. There is much more to this project's success than the few numbers that appear. The "much more" is also inadequately described by the few words that appear above.

ARAPAHOE, WYOMING CHAPTER ONE PROGRAM

The Arapahoe School district consists of a single, K-8th grade school. The area is sparsely populated, and opportunities for gainful employment are practically non-existent. The Arapahoe tribe holds modest oil rights on their Nation, and income from this source underwrites much of the limited economy that exists in the area. There is a Bureau of Indian Affairs school less than two miles from the Arapahoe school. Parents are free to send their children to either "district" (school). In a sense, this situation allows for total freedom of choice by parents. In practice, local educators reported that parents sent their children to one school or the other based on one of three criteria. Primarily, the administration with which they had least recently had a fight. Secondarily, for some parents, the apparently obvious fact that children at Arapahoe were actually learning to read and do math. Third, and at least as powerful as number two, the BIA school was viewed as being less of a hassle. The Arapahoe school almost invariably assigned homework, and involved parents when the work wasn't done. This was a powerful negative in many parents' eyes. Hence, the relative sizes of the two, nearby, rural schools had remained constant for several years.

Total enrollment in this rural school district is 265. 83% of those students are minority (mostly Native American), and 89% receive free or reduced lunch. Two teachers and an aide run the Chapter 1 program out of one large classroom. Average annual cost of Chapter 1 per pupil is $1167.00.

In the last two years, the program has shown gains in reading and math which are far above state and national averages. Interestingly, Arapahoe tends to get it's greatest gains in the upper grades (5-8).

The first goal of the project is to raise student achievement in reading and/or math.

Chapter I is closely integrated into the regular educational program at Arapahoe School. The Chapter 1 director is the unofficial instructional leader/curriculum articulator/teacher-counselor of the school. She is a powerful and important figure.

Chapter 1 parent meetings are held every six weeks. Attendance was 85% at the most recent meeting. The director expressed the view that providing food at the meetings helps increase attendance.

Professional development has been taken seriously at Arapahoe the last few years. It helped a great deal that the state director saw instructional staff development as a major focus.

The Chapter 1 director credits the superintendent and principal with providing strong leadership. While this may be true, one should note that the district has had five superintendents in the last six years, and this program has been exemplary throughout. As was the case in other exemplary programs, the director was self-effacing about her powerful role in the school. Other teachers in the school were more direct. She probably has more informal power than anyone else in the school. She is the instructional leader

of the school. She focuses her leadership on obtaining the highest possible quality education for her students.

The program employs both pull-out and in-class replacement models, depending on the physical layout of regular classrooms, and the psychological preferences of regular classroom teachers. Assessment of student needs is ongoing, and exacting. Their intake process has become a model for the state. It is possible for a student to self-refer at Arapahoe. Each student's progress is monitored by a team which includes the regular classroom teacher. Informal discussions of each child's progress are typically held at least weekly. Attention to student needs is not just a trite phrase at Arapahoe.

A wide variety of materials are available "to nourish and extend children's interests." Books, micro-computers, and a tremendous range of other educational materials are organized in the Chapter 1 space.

The program uses both in-class and pull-out instruction. The choice depends on the physical size of classrooms (Chapter 1 and regular teachers felt that some classes were not large enough to accommodate two teachers simultaneously); and the preferences of the regular teacher (some are uncomfortable having a second teacher in their class.) Whether in pull-out or in-class, children's Chapter 1 services follow a 3 step process:

1) setting specific weekly objectives by the team,
2) direct instruction for the first 30 minutes of Chapter 1 work each day,
3) reinforcement through revolving activity centers (15 min./day.)

Note that Chapter 1 services in Arapahoe is an uninterrupted, 45 minute block. In some districts the time is a brief as 15 minutes. In the two settings, "number of days of Chapter 1 service" might be equal, while number of minutes of Chapter 1 service (a type of data rarely gathered) would vary 300%.

The director genuinely believes that most of her charges can learn "Almost anything they set their minds to." She also believes that, except for learning disabled students, those most at need benefit most from her program. Analysis of students' test scores bore out this finding--on average, the lower the pretest the greater the NCE gain in Arapahoe Chapter 1. This is not an abstract belief. Chapter 1 students are challenged to learn. They are monitored, and reinforced.

The climate of the Chapter 1 program is warm yet professional. Upon entering the Chapter 1 classroom, students know what their daily task is, and they get to it. They like and respect the director, often coming to her for advice.

The study team visitor's measures of time-on-task at Arapahoe demonstrated the academic focus of the project. Little time is wasted, and teachers closely monitor students' attention to academic tasks. Both teachers demonstrated a lot of "withitness". Teachers actively instructed, and students, for the most part, attended to the instruction.

Monitoring of student progress at Arapahoe's Chapter 1 project was near hospital-like. The director seemed to have a sense of the "instructional pulse" of every kid, day to day. This was one of the strongest components of the project.

Students received praise and other, more tangible rewards on a regular basis. Heightening student self concept was a major focus of the program.

Student excellence is rewarded by the staff.

By contrast, the excellence of the project is played down by the Chapter 1 staff, and ignored by the school board.

Yearly evaluations and needs assessments are conducted by the Chapter 1 staff. While the reporting requirement is biannual, the staff is punctual in maintaining accurate, annual evaluations. Those data are used in making ongoing program improvements in this exemplary program.